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WILDLIFE IN NORTH CAROLINA

NORTH CAROLINA Wildlife RESOURCES COMMISSION

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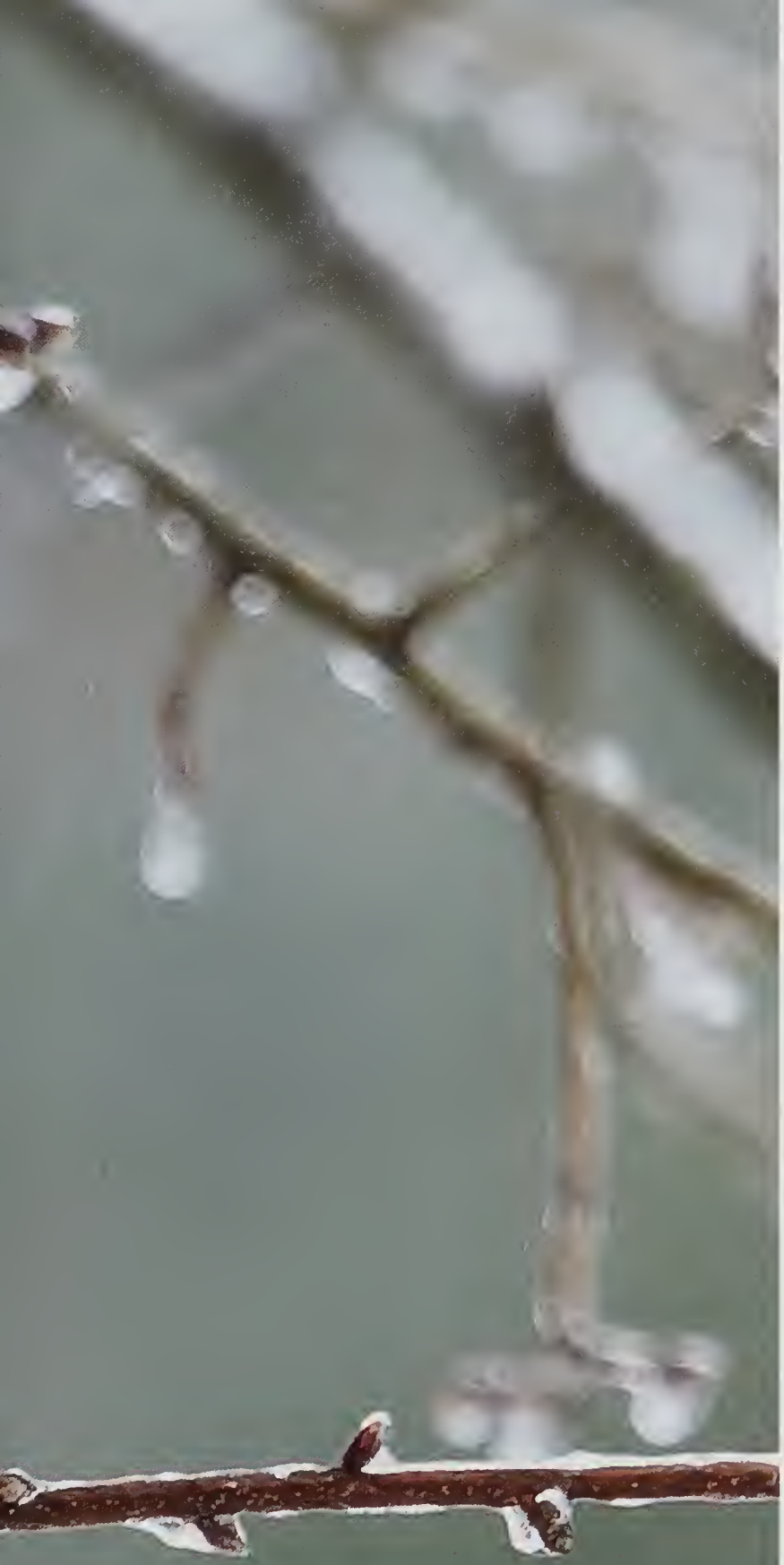
WILDLIFE
IN NORTH CAROLINA
2015 PHOTO COMPETITION

An Eastern bluebird puffs its feathers up on a cold winter's day. The bird's body heats air between the feathers, helping it remain warm while oil on the feathers repels moisture. **PHOTOGRAPH BY WES DEYTON.**



Volume 80 | Number 1

WILDLIFE IN NORTH CAROLINA

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Cover: An assassin fly waits to ambush its next meal from within a squash bloom. Frank Ellison won Grand Prize in the 2015 Photo Competition with this shot. PHOTOGRAPH BY FRANK ELLISON.

Wildlife in North Carolina is the official educational publication of the North Carolina Wildlife Resources Commission. It is dedicated to the sound conservation of North Carolina's wildlife and other interrelated natural resources and also to the environment we share with them.

DIRECTOR'S NOTE

January marks the beginning of a new year and it is fitting that our January issue is also the first issue for our new editor at *Wildlife in North Carolina*, Josh Leventhal. Josh joins our team at the N.C. Wildlife Resources Commission with two decades of experience as an editor and reporter. He is a native of Maryland who spent much of his youth fishing with his father—a tradition he now shares with his three children.

Some of my earliest wildlife related memories are from when I was a young boy visiting my grandparents at Caswell Beach. I remember my grandfather marveling at the aerial acrobatics of gulls while I marveled at formations of brown pelicans gliding inches off of the water surface. Those moments connected us through our fascination with wildlife.

The annual photo contest edition of *Wildlife in North Carolina* is a collection of moments shared among people from all walks of life. Our Grand Prize winner, Frank Ellison, reminds us that we do not have to go off the beaten path to find wildlife. His winning portrait is of an assassin fly, an insect that I can see in my neighborhood located a short walk from our State Capitol Building. Wildlife can be enjoyed by just opening your eyes, wherever you are.

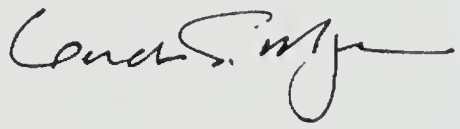
The N.C. Wildlife Resources Commission strives to enhance opportunities to enjoy wildlife through science, outreach, law enforcement, and providing access to land and water throughout the state. In the upcoming year:

• We resolve to increase access and instruction in shooting sports through our Shooting Sports Initiative, including construction of public shooting ranges. A major goal of this initiative is increasing safety in the outdoors. For the second year, we will sponsor a collegiate archery tournament, which extends the popular Youth Hunter Education Tournament for high school and middle school students.

• We also resolve to continue providing access to the outdoors through the development of Game Lands Management Plans that incorporate your ideas. You have an opportunity for input at public meetings scheduled throughout 2016 and online. We will continue to work with city, county, and state parks to construct and maintain fishing piers, boat ramps, and other facilities.

• I hope you will resolve to participate in our January public hearings (see schedule on page 42), which guide the management of our state's wildlife resources in 2016.

Last but not least, I want to thank our incredible team at the N.C. Wildlife Resources Commission. Their commitment to North Carolina's wildlife and wild places is the foundational strength of our agency.



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WILDLIFE IN NORTH CAROLINA

JANUARY • FEBRUARY 2016 VOLUME 80, NUMBER 1

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Dove Story Evokes Memories

Mike Zlotnicki's article in the September/October issue of *Wildlife in North Carolina* described a dove hunting opening day that seemed familiar to me. I dug in an old trunk and found this article from the Winston-Salem newspaper. Both articles make me think that this type of opening day of dove hunting is an old North Carolina tradition.

"Doc" Beale was my uncle and my cousin John lives in Clemmons. John Beale subscribed to the *Wildlife* magazine for me. I usually pass it along so others can enjoy them. The issue with an article about golden eagles went to the National Eagle Center located here in Wabasha. I do enjoy *Wildlife*!

George Carrell, Jr.
Wabasha, Minn.

Editor's Note: Mr. Carrell enclosed a newspaper story about an opening day dove hunt with his letter that included relatives mentioned above.

Runyon's Art Inspires

Our local Audubon chapter, New Hope Audubon Society, has recently subscribed to *Wildlife in North Carolina* magazine to use as a resource for the educational programs we are developing for children called "Know Your Bird Neighbors." We were drawn to the magazine through the work of one of your contributing artists, Annie Runyon, whose work in the magazine in the Wild Notebook section has provided outstanding projects and information for us to use with our children's program to learn not only about birds, but other wildlife as well.

We look forward to future issues of *Wildlife in North Carolina* and will have them available for viewing at all of our upcoming children's programs.

Mary George
Education Committee Chair
Chapel Hill

Raver's Fans Weigh In

As a fellow artist, I was very happy to see the wonderful coverage of Duane Raver's beautiful work in the November/December issue of *Wildlife in North Carolina*. No one deserves this tribute more than he as one of the finest artists in the nation practicing the scientific depiction of fish, and it is true that one cannot miss his work online when researching images of fish. Perhaps only an artist can appreciate the effort involved in that type of scientific illustration... count the scales on a fish and you may begin to sense the initial stages of the problem. Count the feathers in the primary, secondary, and shoulder sections of a bobwhite's wing and turn those feather counts into the various positions of flight and your mind may begin to boggle!

I believe Duane's involvement with *Wildlife in North Carolina* is one of the few that predates my own, but his contributions have far outweighed my own or any other artist I have seen in the magazine. I think I did my first cover in my teens (I'm now 81), but Mr. Raver predates my meager efforts with his covers, calendar images, and as editor of the magazine. It is with great pleasure that I see that we both have examples of our work in the new 2016 Wildlife Calendar!

By the way, judging from the photo on page 20 of the current *Wildlife*, he also keeps a far neater studio than myself!

Robert B. Dance
Kinston

When I was a child I used to look forward to your magazine each month and still do now as someone approaching "senior" status. I was fascinated by the beautiful illustrations that accompanied the interesting stories you had.

The drawings I liked best were always signed by "D. Raver." I studied his work and tried so hard to draw pictures like his as I loved drawing, but his wildlife art was so lifelike that I never came close. I learned to draw people and some of them came easy, but birds and fish were never to come from my pencils or pens.

The North Carolina State Fair called me in the fall of 2007 asking that I come and demonstrate my bowl making craft for that year's fair, and liked my work so much that I was offered a permanent place in their "Heritage Circle," where I've enjoyed being a part of the fair each year since.

At the fair a year or so later I met Mr. Raver and his wife in the "Village of Yesteryear" where he had appeared for many years painting and selling his work. To a kid (now almost 60) that grew up in awe of the talent shown with each story he illustrated—I was overjoyed just to be in his presence. He is such a humble person, so kind, so completely approachable and a person who seemed to be honored by the admiration shown to him by his many fans.

One of my greatest moments in being part of the N.C. State Fair was the day Mr. Raver came down to my setup, saying "he was a fan of my work" and wanted to buy one of my handmade wooden bowls for his wife. Later that evening, Mrs. Raver and their son came down to buy Duane Jr.'s wife a bowl. Duane saw a drawing I did of myself (advertising my business) and commented that he could never draw people and saying that my drawing looked so lifelike (it was about as "ugly as me"). I just about cried, having him commenting so favorably on my work.

He is such a North Carolina treasure. I know that he greatly inspired me. Thank you for this issue's story about him.

JP Madren
Wentworth

write us *Letters should be sent via e-mail to* **letters@ncwildlife.org** *or through regular mail to Letters, Wildlife in North Carolina magazine, 1712 Mail Service Center, Raleigh, NC 27699-1712. Please include your name, address and daytime phone number. Letters chosen for publication may be edited for clarity and length. Editor Josh Leventhal may be reached at 919-707-0177 and Associate Editor Mike Zlotnicki at 919-707-0175. To subscribe call 1-800-786-2721.*

WILDLIFE IN NORTH CAROLINA 2015 PHOTO COMPETITION

For someone who has only been practicing serious photography for about eight years, Frank Ellison has done pretty well for himself. Ellison, 53, took first place in the Invertebrate category in the 2014 Photo Competition and now earned the top prize in the 2015 *Wildlife in North Carolina* Photo Competition.

"It gives me something to do," Ellison said of his photography hobby. "I actually don't like to shoot people. I like nature better. I like shooting micro. On that winning picture the flower is actually touching the lens."

Ellison, who is head of maintenance at Industries for the Blind in Winston-Salem, lives in Clemmons with his wife Julie and sons Taylor, 10, and Austin, 12. A small garden planted next to his house is a favorite haunt for Ellison and the bugs he likes to shoot.

"I usually come out early in the morning and look for micro shots," he said. "We have tomato, squash and butterfly bushes next to the house. I saw a dark object in the yellow bloom and looked in and saw he was looking right back."

Ellison shot about seven frames and went on with his morning. He has had several images published online at National Geographic's Your Shot picture gallery, but didn't think he had a winner with the assassin fly when he first saw it on his computer monitor. So, it's taken a while for the reality of winning to sink in."I don't have anything to compare it to," he said. "It's the first major photo competition that I've won."

If Ellison has a "secret weapon" it might not be his Nikon D700, but perhaps his little garden next to his house. He said the winning shot he got for the 2015 contest was taken 10 feet from the spot he shot an assassin fly to win the Invertebrate category last year. It's proving to be a very fertile garden.

Marsha Tillett, the art director at *Wildlife in North Carolina*, commented on this year's contest, including Ellison's assassin fly image. "The *Wildlife in North Carolina* staff really enjoys the photo competition issue. We like seeing what our readers are experiencing, and once again the submissions for this year's contest were filled with many beautiful images. But the remarkable eyes of this fly, and the striking contrast of colors in this photograph stood out to all the judges and was easily chosen as our grand prize winner."

The other four judges for this year's contest were staff graphic designers Amy Friend and Bryant Cole and staff photographer Melissa McGaw. Mike Dunn, retired senior manager of outreach at the N.C. Museum of Natural History, was also a judge and is a veteran photographer in his own right.

This year we had an uptick in entries with almost 1,500 images uploaded. All winning photographs may be seen on exhibit at the N.C. Museum of Natural Sciences in Raleigh and on our website at ncwildlife.org.

–Mike Zlotnicki

Frank Ellison, Clemmons
Assassin fly, Clemmons

I picked this photo to enter in the contest because of one simple thing: the eyes. I love to shoot the assassin fly for its eyes. I also like the way the insect eats its prey. It will land on a bee or other larger flies and stab them in the back with the post on its face. I never kill one as they are one of the best insects to have around the house to kill other pests. I was walking by the garden and spotted this one in a squash bloom. I ran to grab my camera and popped on the micro lens to get this picture.

(Nikon D700, Nikon 60mm micro lens, f/18, 1/100 of a second)

BIRDS **FIRST PLACE**

Daniel Pullen, Buxton
Slow-shutter gulls, Cape Hatteras

I shot this from my truck on my way out to Cape Point at Cape Hatteras National Seashore. A ton of birds gather on the beach in the winter and they just all take off and scatter if a car gets close. I was driving and shooting at the same time (probably not recommended) but it added a little extra blur to the photo.

(Nikon D4s, Nikon 70–200mm/2.8 at 200mm, ISO 100, f/16, 1/15 of a second)

BIRDS **SECOND PLACE**

Neil Jernigan, Snow Hill

Cormorant in the rain, Lake Mattamuskeet

While searching for wildlife to photograph at Lake Mattamuskeet National Wildlife Refuge, I came across this double-crested cormorant. Having not seen much, due to it raining all day, I decided to stay and photograph it. After a few moments of just sitting still, it started to reposition itself. Seeing this, I got ready and started photographing the moment it began to fly off. Since it was overcast I had set my ISO pretty high to get a fast enough shutter speed to freeze the rain drops, which also helped me in capturing the exact moment it took flight.

(Canon 5D Mark III, Canon 500mm F/4 IS II, 1.4x Extender, ISO 3,200, f/5.6, 1/1,000 of a second)

BIRDS **THIRD PLACE**

Gene Furr, Raleigh

Egret on the Wing, Southport

It had been seven weeks since I had orthopedic surgery on my left foot. I was having a bad case of cabin fever. Therefore, I took a road trip to the Southport area searching for birds while I was wearing an orthopedic boot. I found a location where I could set up and with a lot of patience wait for the birds to come to me. After two days, a great egret made a visit searching for food at sunrise. I waited for the egret to fly past the beautiful reeds in the background.

(Nikon D4, Nikon 400mm f/2.8 lens and a 1.4 extender at 560 mm. ISO 400, f/5.6, 1/1,500 of a second, tripod)

MAMMALS **FIRST PLACE**

Dan Beauvais, Kitty Hawk
Red fox kit frightened by a crow, Duck

While at a reception for an art show where I was exhibiting, news quickly spread that a fox family was currently active around a nearby structure. As soon as the reception ended, I joined the watch. This red fox kit was initially out playing, but frightened by a crow, took cover in its den. After several minutes, the kit peeked out and warily scanned the sky to determine if it's safe to be back outside.

(Nikon D800, Nikon 200–400mm f/4 lens with Nikon 1.4x teleconverter, at 550mm, ISO 800, f/5.6, 1/200 of a second, Induro CT414 tripod, Really Right Stuff BH-55-Pro ball head, Induro GHBA gimbal head)

MAMMALS **SECOND PLACE**

Neva Kittrell, West End
Squirrel running with hickory nuts, West End

I was taking pictures of my horses in the pasture when I heard some noise up in the nearby hickory tree. I looked up to see three squirrels harvesting the nuts. The leaves were gone so it was easy to see them. They were stretching and jumping to reach the highest ones and I watched for a while and took a few photos of them. One of the squirrels ran down the tree and across the pasture in a big hurry to hide his prize. I set the camera on continuous shutter and kept shooting while I panned. He was really fast, so I felt lucky to catch this one shot.

(Nikon D800, Nikon 70–200mm lens at 200mm, ISO 400, f/7.1, 1/160 of a second)

MAMMALS **THIRD PLACE**

TJ Hilliard, Fuquay-Varina
Wild horses, Corolla

I am a lifelong North Carolinian and had never seen the wild horses that inhabit the Outer Banks. On a trip to Nags Head in February of 2015, I decided to take a ride with friends up to Corolla. I caught a glimpse of a few horses walking into the brush in the village, but I didn't have much of an opportunity to photograph them. As I drove out along the beach, I noticed a group of five horses standing on top of the dunes as if they were awaiting me. I parked on the beach and approached slowly, making sure to keep a comfortable distance for the horses. It was 21 degrees that day, so I took about 20 or 25 frames and returned to the warmth of my vehicle. This was one of several frames that I was especially proud of.

(Nikon D7100, 400mm, ISO 400, f/6.3, 1/640)

REPTILES & AMPHIBIANS **FIRST PLACE**

Neil Jernigan, Snow Hill
Marbled salamander, Snow Hill

Late one evening, I received a call from my dad saying he had discovered a large salamander in his yard. I gathered my equipment and went straight there. It had been raining most of the day and was still sprinkling. I wanted to show the rain drops in the image, so I lit the salamander with a portable spotlight and quickly set up an off-camera flash behind it. The flash from behind, when triggered, lit up all the rain drops. I knew immediately after creating this image that I had achieved my goal.

(Canon 5D Mark III, Canon 100mm f/2.8, ISO 400, f/5.6, 1/100 of second, strobe and spotlight)

REPTILES & AMPHIBIANS
SECOND PLACE

Ellen Devenny, Kings Mountain
Tree frog on stump, Kings Mountain

This image of a tree frog was taken in my backyard in Kings Mountain. We have lots of old chestnut oak trees in our yard and there are plenty of tree frogs, but sometimes they show up in some odd places. Back in the spring we had one that was living in a birdhouse. We spotted this one on the edge of a window. We carefully moved it to an old tree stump in the backyard. Before it could hop away, I grabbed my camera to capture a few shots.

(Canon 6D, Canon 75–300mm lens at 300mm, ISO 100, f/8, 1/13 of second, Manfrotto tripod)

REPTILES & AMPHIBIANS
THIRD PLACE

Alicia Heath, Sandy Ridge
Leopard frog, Hanging Rock State Park

While hiking on the Riverbluffs Trail at Hanging Rock State Park, my daughter and I went down to look at the river. We were walking along the riverbank and this leopard frog jumped out in front of us and into the edge of the water. It must have felt safe being partially submerged under the water because it let me get really close so that I could get some great shots. Its markings and colors were beautiful.

(Nikon D3300, Nikon VR 18–55mm, ISO 200, f/5.6, 1/320 of a second)

INVERTEBRATES **FIRST PLACE**

Timothy Faulkner, Kinston

Snail on a post, Kinston

I love photography and enjoy what wonders God reveals. While at a friend's house for a cookout, we were walking by the fence post when I noticed the snail sitting on the post. I then went to my car and grabbed a camera. I sat there and photographed him for a while. Then the sun broke and shined on the post, which singled out the snail and post.

(Canon 7D Mark II, Sigma 150–500mm lens at 500mm, ISO 6400, f/9, 1/320 of a second, turned black-and-white with Silver Efex Pro 2)

INVERTEBRATES **SECOND PLACE**

Kirk Pullen, Warsaw
Fly on a windshield, Outer Banks

In the spring and summer I like to shoot bug macros when I visit the Outer Banks. While searching around for bugs to photograph, I noticed a simple house fly on the side of my SUV. I am embarrassed at how dirty my vehicle was, but it ended up turning the dirt particles into intriguing bokeh.

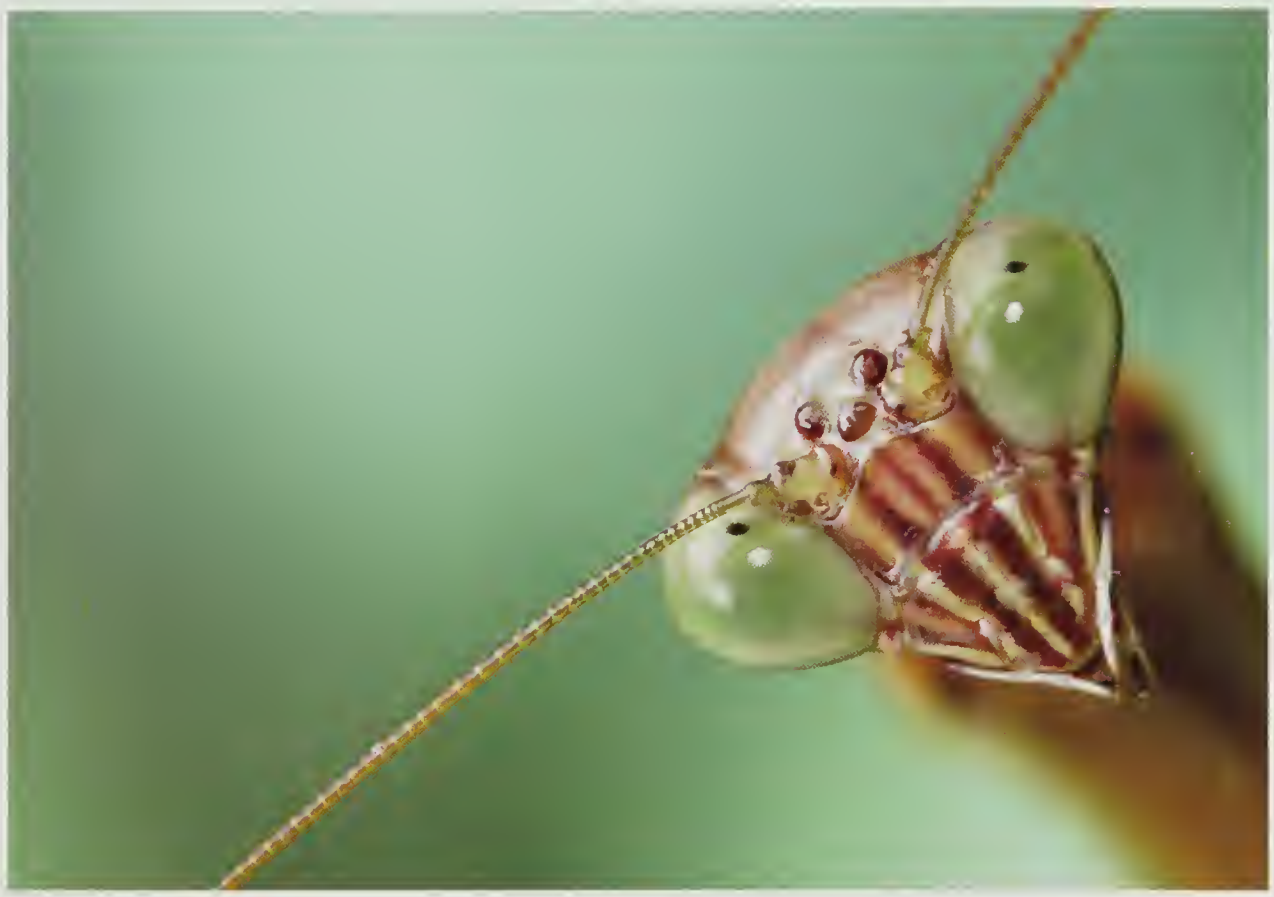
(Nikon D700, Tokina 100mm macro lens, ISO 640, f/29, 1/80 of a second, Alien Bee 1600 strobe with portable power pack)

INVERTEBRATES **THIRD PLACE**

Ellen Devenny, Kings Mountain
Praying mantis portrait, Kings Mountain

The praying mantis shot was taken in my backyard in Kings Mountain. I love photographing praying mantis, so you can imagine my excitement when my husband found an egg case while trimming some bushes in the front yard. I placed the egg case in a netted butterfly habitat and waited for springtime. When the hatchlings arrived, they were moved to our backyard. The one that I captured in this image was probably one that reached adulthood.

(Canon 6D, Canon 24–105mm L series lens at 105mm, Kenko Extension Tubes, ISO 400, f/5.6, 1/60 of a second, Canon 430 EX Speedlight)



WILD PLANTS **FIRST PLACE**

Matthew Cuda, Tobaccoville
Dew on a leaf, northeastern N.C.

This image of a poplar leaf was a nice surprise while walking through a picnic area in eastern North Carolina. My 11-year-old daughter spotted it first and thought it looked interesting, so I bent over and noticed the dew had a beautiful pattern to it. The added bonus for me was the beautiful yellow color of the poplar leaves after they fall from the tree.

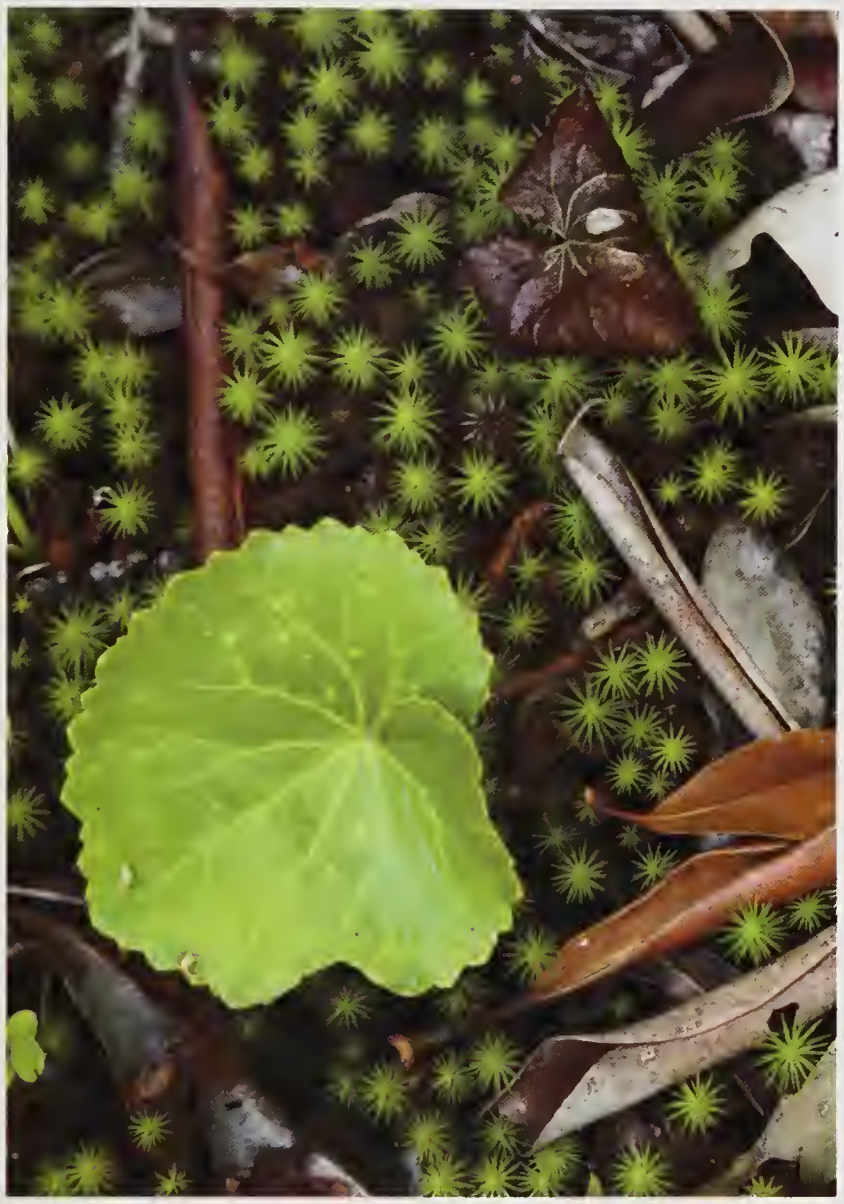
(Canon 7D, Canon 50mm/1.8, ISO 400, f/8, 1/500 of a second)

WILD PLANTS
SECOND PLACE

Ellen Devenny, Kings Mountain
Starburst moss and leaves, Table Rock Mountain

The hike to the top of Table Rock Mountain was not the easiest I've been on, but definitely one of the most rewarding. The view when you reach the summit is one of the best in North Carolina. Coming back down the mountain, I was able to pay closer attention to the plant life. The starburst appearance of the moss is what captured my attention for this shot.

(Canon 6D, Canon 24–105mm L series lens at 67mm, ISO 400, f/8, 1/50 of a second)



WILD PLANTS
THIRD PLACE

Wick Smith, Fayetteville
Frosty plants, Pungo Lake

I was at Pungo Lake shooting the varied birds that were wintering there. It was a very cold morning with a heavy frost on the ground. Just after sunrise, I had gotten all the shots of birds I was going to get. I looked around for other compositions and noticed some incredible patterns in the plant life due to the frost. This frame was particularly intriguing, with the icy water picking up just a bit of the blue in the sky and the contrast with the white frost on the plant stalks.

(Canon 5D Mark III, Canon 70–200 II 2.8 at 200mm, ISO 400, f/11, 1/2 of a second)

OUTDOOR RECREATION **FIRST PLACE**

Jake Orr, Topsail Beach

Retriever training, Ocracoke Island

This photo was taken on Ocracoke Island when my brother, Rob, and I decided to break from our work for a quick training session with his 2-year-old Chesapeake Bay retriever, "Deep." As an early summer thunderstorm mounted over the Pamlico Sound, I was provided the conditions to capture this timeless moment of a man and his dog in a classic Carolina setting.

(iPhone 6, 4.15mm, ISO 320, f/2.2, 1/2,000 of a second)

OUTDOOR RECREATION
SECOND PLACE

Daniel Pullen, Buxton
Drum fisherman, Cape Point

I went out to Cape Point with the intentions of shooting portraits of fishermen and their catch. My brother Kirk Pullen came out to help hold a flash for me. The flash is just to the left of the camera to add a little light to my subject.

(Nikon D800, Nikon 35mm 1.4, ISO 320, f/3.2, 1/80 of a second, Nikon SB900 flash with Magmod Grid)

OUTDOOR RECREATION
THIRD PLACE

Ian Privette, Whitefish Mont.
Quail hunt with Brittany, Bladenboro

I took this picture of a father and son at the end of their quail hunt in Bladenboro. As a guide, there are a lot of times during a quail hunt where it can be difficult to choreograph hunters and dogs, let alone find a place to take a photo. Here, I was lucky enough to be in the right place at the right time, take a knee, and take a picture. I love the story it tells with the father and son mirroring each other over a bird dog. It speaks of the tradition handed down through the generations. The photo was taken with a simple waterproof point-and-shoot camera that frequently jostled around in my bird vest, just in case, if things came together (light, composition, and subject) I could at least capture a split second of the day chasing bobwhite quail until the fading minutes of sunlight.

(Olympus StylusTough-3000, ISO 64, f/4, 1/400 of a second)

WILD LANDSCAPES **FIRST PLACE**

Daniel Pullen, Buxton
Rough surf, Cape Point

This was shot during the "golden hour" out at Cape Point. Two major currents collide to create the shoals off of Cape Point. They sometimes collide right at the perfect time to create water works of art.

(Nikon D4s, Nikon 70–200mm/2.8 zoomed at 200mm, ISO 200, f/4, 1/1,000 of a second)

WILD LANDSCAPES **SECOND PLACE**

Greg Mills, Fuquay-Varina
Broken pier, Frisco

Along the Cape Hatteras National Seashore sits one of my favorite Outer Banks subjects, the Frisco Pier. I arrived well before dawn on this particular morning, focused on capturing sunrise between broken sections of the pier. Little did I know the sky would deliver one of the most spectacular scenes that I have ever been blessed to photograph. Sadly, there are no plans to rebuild this pier, but until it's gone I plan to continue chasing the light at this coastal landmark.

(Canon 5D Mark III, Canon EF 24–105mm f/4L IS at 82mm, ISO 100, f/22, 1 second)

WILD LANDSCAPES **THIRD PLACE**

Carl Chiang, Greenville
Hatteras Lighthouse, Hatteras

This was taken after midnight June 13, 2015. I had just started doing astrophotography as a hobby in May of 2015 and I was mesmerized by the infinite number of stars visible in the night sky with the newer digital cameras. I wanted to do a panoramic photo to capture the magnitude of the Milky Way in all its glory over one of the most iconic structures in all of North Carolina.

(Nikon D810, Nikkor 20mm, ISO 3,200, f/2.0, 10 second exposures stitched in Lightroom)

ANIMAL BEHAVIOR **FIRST PLACE**

Matthew Cuda, Tobaccoville
Screech owl vocalizing, Huntersville

I took this image of the eastern screech owl while he was vocalizing and most likely working on his breakfast a bit at the same time. Because it was so early in the morning, fill flash was used to fill in some of the shadow and provide a catch light in the owl's eye. This image was captured at the Carolina Raptor Center during a special event featuring birds of prey in natural habitats.

(Canon 7D, Canon 70–200mm f4 L lens, ISO 1,250, f/4, 1/125 of a second, fill flash)

ANIMAL BEHAVIOR
SECOND PLACE

Daniel Pullen, Buxton
Seal on beach, Cape Point

I had no intentions of shooting wildlife this particular evening. I was actually out at Cape Point trying to get photos of waves. This little guy swam up right at sunset. I guess I was at the right place at the right time.

(Nikon D4s, Nikon 70–200mm/2.8 at 170mm, ISO 400, f/2.8, 1/250 of a second)

ANIMAL BEHAVIOR
THIRD PLACE

Eric Abernethy, Asheboro
Eastern coachwhips, Scotland County

This photo was taken in the North Carolina Sandhills. While I was cruising for reptiles these two Eastern coachwhips crossed the road and I followed them into the brush and began photographing them. They did not care that I was there so I took some close up photos of the interaction between the two.

(Nikon D7000, Nikon 10.5mm fisheye lens, ISO 800, f/6.3, 1/400 of a second)

YOUTH PHOTOGRAPHER 13–17
FIRST PLACE

Nicole Howren, Cary
Winter sunset on beach, Frisco

I composed this photo at the Frisco Pier, where we visit often ever since I was a little girl. I wanted to do something different than the usual beach sunset picture. It was winter and the water was freezing, but as a photographer, the most rewarding photos are the ones where you have to endure different situations. I love the colors of a winter sunset on the Outer Banks.

(Canon 5D Mark III, Canon 50mm, ISO 640, f/4, 1/2,500 of a second)

YOUTH PHOTOGRAPHER 13–17
SECOND PLACE

Madison Woodard, Burnsville
Mallard duckling

My grandparents have a little pond where two mallard ducks live. Each year we had the hopes that they would have ducklings. Well this is the very first year they have! My Grandpa called me saying there were babies, so I grabbed my camera and snapped away! It was just too cute to not take a picture.

(Canon EOS Digital Rebel XT, 300mm lens, ISO 100, f/5.6, 1/250 of a second)

YOUTH PHOTOGRAPHER 13–17
THIRD PLACE

Noelle Deichler, Pittsboro
Ruby-throated hummingbird in flight

Hummingbirds have always been fascinating to me and their quick movement lured me to attempt catching one with my camera. I got this shot from my front porch. A column was my hiding place while I waited patiently with my camera poised. Straining to be perfectly still, I took many shots toward the feeder about 10 feet away. I was thrilled to discover later when reviewing my catch, this proud male in a most majestic pose.

(Nikon D3200, Nikkor 55–300mm 4.5-5.6G ED at 270mm, ISO 400, f/6.3, 1/1,600 of a second)

YOUTH PHOTOGRAPHER 13–17
HONORABLE MENTION

Emma Halstead, Walkertown
Spiderweb on deck, Walkertown

For days this spider had its web on the bathroom window, then it moved over to the broken railing where I took this photo of it. My whole family had been watching it, and as of the last time I checked it is still living in our yard. This spider was interesting to watch because it would rebuild its web every morning, and when it was on our bathroom window we would sometimes see it catch bugs.

(Nikon D3100, Nikon lens at 85mm, ISO 400, f/7.1, 1/125 of a second)

YOUTH PHOTOGRAPHER 13–17
HONORABLE MENTION

Joshua Hunter, Salisbury
Basking dragonfly

I was able to photograph this beautiful dragonfly on a warm day in August. The insect was basking on a fence while I had my Canon kit/macro lens on. I slowly crept up to the animal, and as silently as I could, took a few shots. After about 20 seconds, most animals no longer see you as a threat. I was able to have a good five-minute session with this dragonfly, and the photographs I got were amazing.

(Canon T4i, Canon 18-135mm IS STM lens at 135mm, ISO 500, f/5.6, 1/250 of a second)

YOUTH PHOTOGRAPHER 13–17
HONORABLE MENTION

Madison Woodard, Burnsville
Wasps on a flower, Roan Mountain

During the summer, my grandpa took me on a day hike on Roan Mountain. While we were hiking, I noticed several flowers with groups of wasps on them. I thought it was really interesting so I took a picture!

(Canon EOS Digital Rebel XT, 75 mm focal length, ISO 250, f/8, 1/500 of a second)

YOUTH PHOTOGRAPHER 12 & UNDER
FIRST PLACE

Addison Latham, Apex
Immature bald eagle, Jordan Lake

My dad started teaching me how to take pictures when I was 8 years old. I love going with my dad and taking pictures at high school sporting events and around the house. This year I finally got a chance to go to Jordan Lake and take pictures of the bald eagles. On my first trip to the lake back in March I was practicing with my dad's camera and new lens shooting pictures of sea gulls. All of a sudden two bald eagles, a mature and a juvenile, came flying right at me. They were fighting over a fish. I turned the camera to get the eagles in focus. As soon as I could see them in the camera I started shooting as fast as I could. Afterwards I got several great pictures, including this one of the juvenile. My dad and I were so excited and had the best time together that day. I can't wait to go back this winter when the eagles return!

(Nikon D7100, Tamron 150–600mm at 600mm, ISO 640, f/6.3, 1/3,200 of a second)

YOUTH PHOTOGRAPHER 12 & UNDER
SECOND PLACE

Tyler Jernigan, Snow Hill
Eggs in nest, Snow Hill

While picking blueberries in the edge of his yard, Tyler noticed this Northern mockingbird's nest. He wasn't able to see into the nest right away, so after getting a stool to stand on, he saw that there were four eggs located inside. Excited about his discovery he immediately went to get his camera. He returned to the nest with camera in hand and photographed it for a couple of minutes. Nervous that the mother of the eggs would soon return he quickly finished and left it just as he found it, hidden in the blueberry bush.

(Canon Rebel XSi, Canon 18–55mm, ISO 400, f/5.6, 1/60 of a second)

YOUTH PHOTOGRAPHER 12 & UNDER
THIRD PLACE

Kaitlyn Molnar, Raleigh
Baby bunnies, Raleigh

One night my dog was outside barking at something and it turned out to be a baby bunny in the backyard. We couldn't find the nest so we brought it to a wildlife rehabilitator. The next day we found a nest under the deck and inside the nest there were three little baby bunnies. I told my mom this would be a great picture so I quietly and carefully went over to the nest and took a picture. The bunny picture was special to me because my dog found the smaller baby away from the nest and helped save it.

(Sony Cyber-shot DSC-WX50, Carl Zeiss VarioTessar Lens 28–140mm f/2.6-6.3, 1/1,600 of a second)

YOUTH PHOTOGRAPHER 12 & UNDER
HONORABLE MENTION

Taylor Ellison, Clemmons
Toad on wood, Sunset Beach

My family and I found this little dude on our way to the beach in Sunset Beach. This dude and his whole family were just sitting there and I've got to say it was a huge group of them. I asked my dad if I could take one of them home but then I thought 'what if I got taken away from my family?' So I asked my dad if I could take a picture of him and hang it on my wall and he said sure. So I took his picture and I put it on my wall. I had no idea that my dad put it on the site but I am glad he did. And now I have his picture on my bedroom wall. And I am so glad I did not take him and he got to stay with his family.

(Sony DSC-HX400V, 14mm, ISO 500, f/4, 1/80 of a second)

YOUTH PHOTOGRAPHER 12 & UNDER
HONORABLE MENTION

Addison Latham, Apex
Mature bald eagle, Jordan Lake

On this day my dad took me to the Jordan Lake dam to see if we could get pictures of the migrating ospreys. We saw several ospreys and even got some nice pictures, but just as the sun went behind the trees and we started to pack up a bald eagle came flying up the river right for us. Luckily we hadn't put up the camera yet so I was able to take about seven pictures before the eagle flew right over our heads! When we looked at the pictures my dad could not believe that I got all the pictures in focus. I really like this picture because of the way the eagle is flying right at us and making eye contact.

(Nikon D7100, Tamron 150–600mm at 600mm, ISO 640, f/6.3, 1/3,200 of a second)

YOUTH PHOTOGRAPHER 12 & UNDER
HONORABLE MENTION

Austin Ellison, Clemmons
Bass in the net, Sunset Beach

One day at Sunset Beach on a golf course, I was throwing my cast net in water that was full of alligators. My dad and I had been to that golf course before but we had never thrown the cast net there before; we think that the alligators ate all the big fish. My dad and I love to see alligators in the wild. I read about when alligators almost went extinct. For this picture I saw the setting sun glittering off my net with the scales of a baby largemouth bass. I instantly thought that I should take a picture and that is how I got this picture.

(Sony DSC-HX400V, 4.3mm, f/3.2, 1/100 of a second)

Mr. B &
a Little Brown Pup

An old mentor and young dog provide cherished memories for a hunter

WRITTEN BY KEITH HENDRICKSON
& ILLUSTRATED BY GARY PALMER

I guess as we mature (at my age, it is more like flat-out getting old), the realization does not gradually sneak up on us that we are truly cresting that constantly mentioned hill we so obviously try to avoid. This realization smacked me right in the face not too long ago when my old high school hunting buddy called to tell me that his father had passed away. My friend and his dad were squarely to blame for this disease known as hunting that I am so infected with. Doing much traveling with my current job, I had lots of time to reminisce about past hunting trips made possible by this fine and generous gentleman.

My father wasn't much interested in hunting even though he grew up with it and relied on the game he could bag throughout the Great Depression. As I became more interested in hunting when I hit my teens, about the only thing Pop showed interest in was seeing that I paid for my shotgun and transportation with my own money. I was fortunate to have met a classmate whose father (Mr. B) was an avid hunter and totally devoted to passing his life's passions on to his sons and even their friends. Many of my fondest memories came from the bench of a duck blind or even the deck of Mr. B's big Grady-White; just this man and me . . . because his son, my friend, was off pursuing other teenage adventures.

As I grew and entered college, the trips did not end. By that point I dearly wanted a retriever I could call my own and was fortunate enough to receive a gift from another fine and generous gentleman in the form of a small little brown ball of fur known as a Boykin spaniel. Back then, the breed was for the most part unknown and few hunters realized the abilities the small dog possessed. After getting the pup, one evening my classmate's father called me over and presented me with a copy of Richard Wolters' book, "Water Dog," and told me I would need all the help I could get as there was no way that little brown mutt would ever make a retrieve on anything bigger than a teal. I used that book chapter by chapter in training my Boykin, and in a very short time, I had one heck of a pup. I'll save the field trial bragging rights for other stories and relay probably the most memorable hunt I had the privilege of sharing with my friend's father.

Mr. B was one of three founding members of a duck club on the North Carolina coast. He brought his son and me down to the club several times to hunt, and during the offseason, we would return to work on the grounds or on the blinds and fish the impoundments. It was on one of those work weekend trips I brought my little pup, Buddy, for an afternoon dove hunt where the little guy showed off his newly-learned talents. He made some incredible retrieves into the woodline to fetch downed birds that sailed out of sight, so the pup had the attention of more than one club member that weekend. A few short weeks later the second part of the duck season was upon us and I had hopes that Mr. B would call so I could hunt the opener there at the club. I was not disappointed. But what a look I got from Mr. B when I walked out to load my gear in his truck with that brown dog in tow. "Is that guy really ready for this?" he asked. And once we arrived at the club many of the members remembered the pup from dove season, but none had any confidence in his duck-retrieving abilities since he wasn't even a year old yet. They all had no clue what the little mutt and I did during the early wood duck season, so I was bursting with anticipation for the next morning's hunt.

As the evening wore on and a fine meal was served, it was time to draw blinds and choose hunting partners. I felt like a little kid waiting to be drawn from the gang of kids at the neighborhood ball game . . . maybe I'll be next . . . no . . . well the next guy will pick me . . . no. When it was finally Mr. B's turn, he looked at my low slung face and said he would hunt

It was on one of those work weekend trips I brought my little pup, Buddy, for an afternoon dove hunt where the little guy showed off his newly-learned talents.

with me and made some sort of snide comment pointing out that no one would probably have chosen me since I had that crazy wild pup with me.

There was no sleep for me that night. I was so wound up with anticipation for the next morning to arrive. Alarm clocks could finally be heard and we all shuffled into the kitchen for breakfast before finally making our way out to our blinds. Mr. B wasn't so sure about the blind we drew; a blind on a flooded field impoundment. Since the impoundment was new that season, the ditches were deep and the dike around the field was still rough and high.

Mr. B was rolling on the floor of the blind with laughter and I was yelling, "BACK… BACK!"

We saw many mallards and a few teal using the spot the day before and felt confident we would get some good action there that morning. Despite the fact it was the opening of the November section of the season, it was still very warm. I remember Mr. B joking that if we didn't see any ducks to shoot, we could always shoot the mosquitoes as they were about the right size for Buddy to retrieve. As the sun crept up giving us just enough light to see just how many and how big those mosquitoes really were, we were buzzed by a small flight of teal . . . just a few minutes more until legal shooting time. As warm as it was, I could remember hearing Buddy shivering with excitement. His teeth were chattering against each other as he peered out the dog's door in the front of the blind.

Now let me point out one thing about Mr. B: As generous as he was with his time and money that man never gave up anything when it came to shooting. So when the first duck passed within shotgun's reach, he was on it like white on rice. One shot and the mallard drake was sailing for the marsh behind us. Buddy, my dear dog, was clueless. He never saw the mark. He had made many retrieves on woodies standing out in the marsh flats during the first season, but this blind thing was totally new to him and I had neglected to even think about the differences in what would be so basic to him—sight. The bird flew straight over us and the shot was fired directly above. The bird then sailed behind us so there was no way that the pup would see it looking out the front door. "No problem," I thought because the pup did know the basics on hand signals. I sent him down the steps and out the back of the blind, across the canal and then onto the dike. I then sent him in the direction the bird sailed. Standing on the blind seat I could see the duck was still swimming hard and fortunately Buddy saw it too.

Mr. B was a bit embarrassed as it was prime shooting time and here we were, or at least here I was standing on the seat of his blind, sending this brown pooch on a field trip. But Buddy made quick time (or so I thought) of the retrieve. Duck in mouth, he made his way back to the dike with marsh grass hanging on

both sides of his head. As he climbed up onto the dike, I said, "Well, what do you think about him now?" Just then, Buddy set that duck down and began to shake off the grass and water. That wounded but very alive bird turned around and ran back down the dike and hit the water at a full run. Buddy got himself together and bent down to pick up that first mallard of his and literally looked from side to side for the bird that was no longer there. Mr. B was rolling on the floor of the blind with laughter and I was yelling, "BACK . . . BACK!"

Buddy finally turned and looked and saw that duck heading back across the marsh. He launched back into the water getting the duck and made his way back to us like nothing had ever happened. By this point Mr. B was far more interested in what was going to happen next to give a hoot about any other ducks flying by, so together we watched as Buddy made his way back up onto the dike, again with grass and water dripping from his head.

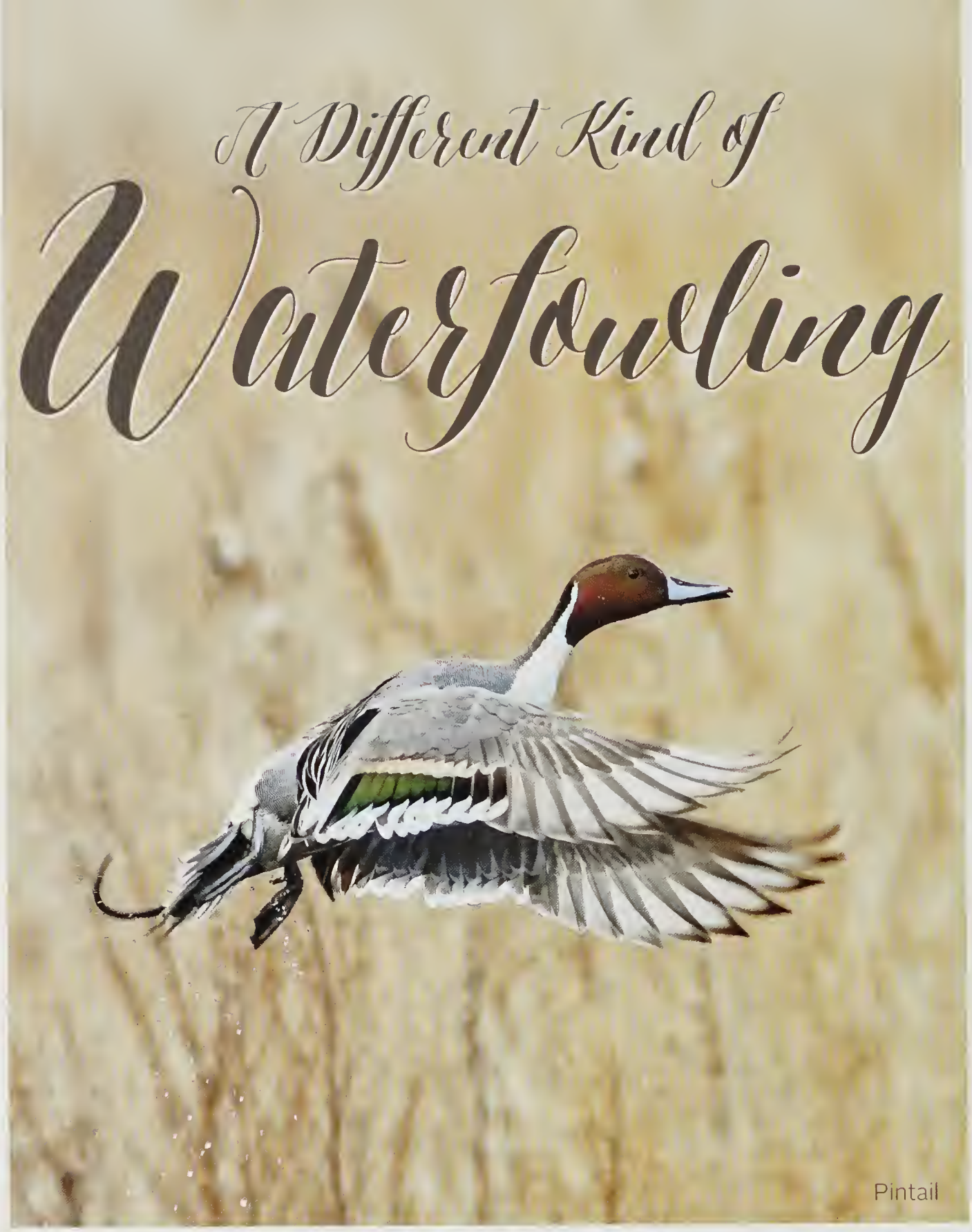
You guessed it; the pup set the bird down to shake off and the duck turned and ran back down the dike into the marsh once again. By this point Mr. B could no longer see what was happening. He was laughing so hard he was crying and I was too but not from laughter. Again, Buddy looked down and did a double take ... that darn bird had disappeared again. He heard me screaming at him and turned and saw the duck heading back into the marsh. Once again he ran back after the greenhead and got him. I was too embarrassed to even watch what was going to happen next. As Buddy climbed up out of the marsh for the third time, again with grass hanging from his head and neck, and water dripping, I knew . . . I knew . . . and in total amazement, the two of us watched that pup set that duck down, place his front paws on the back of that duck, pinning it so it couldn't run away and shake to his heart's content. He then picked the drake back up and delivered him to hand.

I don't remember much about the rest of the hunt after that retrieve, but I do know it wasn't the last time Mr. B and I hunted together, and after that day, both of us left with a little more confidence that my pup would turn out OK, along with a grin from ear to ear. I do however remember Mr. B telling everyone he knew, year after year, about that crazy pup and that unforgettable urge to shake. All I could do was mumble a few profanities about Mr. B's lack of quality shooting skills that would actually dispatch a flying fowl instead of allowing it to sail into unknown, uncharted waters.

As memorable hunts and trips with this gentleman went, this was truly one I will never forget. I can only hope that as time goes by, I too will one day be fortunate enough to instill memories such as this into some lad's head, just as Mr. B had done for me.

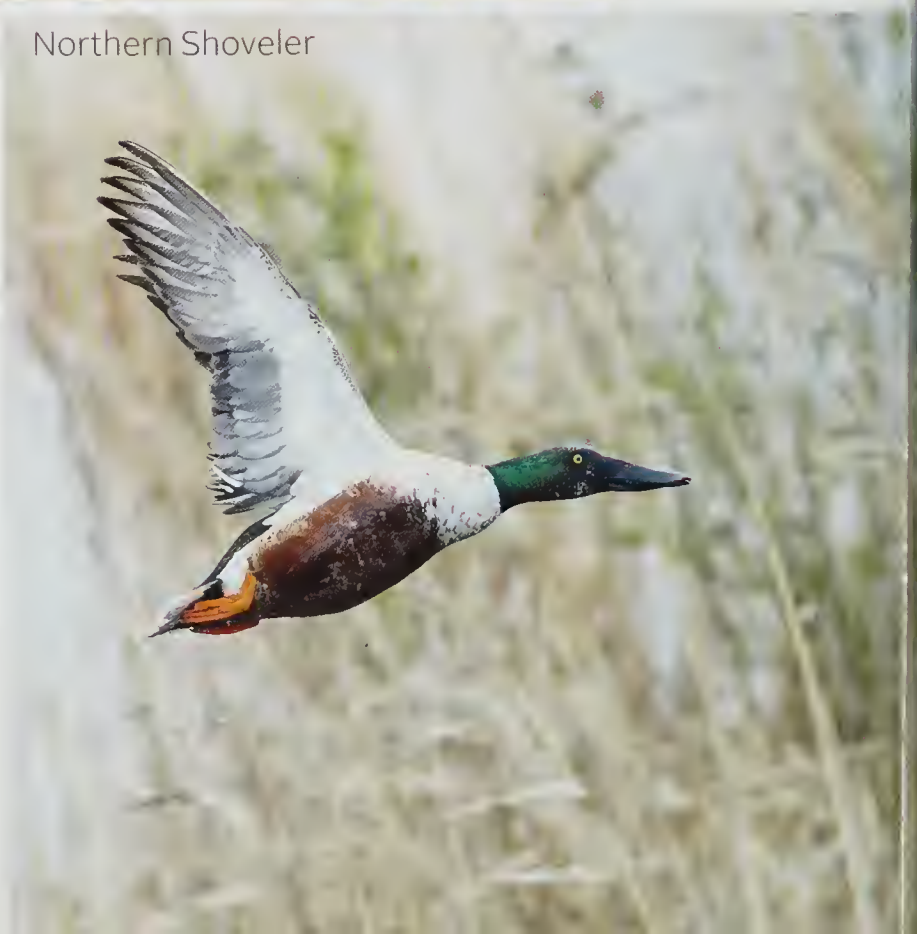
Keith Hendrickson is a retired conservation technician with the North Carolina Wildlife Resources Commission.

A Different Kind of Waterfowling



Pintail

Blue-winged Teal



Northern Shoveler

Jump-shooting waterfowl with a camera is almost like catch-and-release. The pintail, top, blue-winged teal and shoveler all live to fly another day.

Black Duck

Gadwall

Male and Female Mallards

Duck hunting doesn't have to mean a full choke and non-toxic shot. A long lens on a digital camera offers the same challenge.

Written & Photographed by James F. Parnell

For most of my adult life duck hunting was a passion. Living in Wilmington, I enjoyed the lower Cape Fear River, Pamlico Point and many blackwater streams. I even made a few trips to Canada and the Dakotas to chase waterfowl. I loved to hunt over decoys and to drift a creek in a canoe jump-shooting woodies and the occasional black duck or mallard. As I passed the 70-year mark and headed toward 80 years, I discovered that duck hunting was a lot harder than I remembered. Getting up at midnight, driving from Wilmington to the landing at Pamlico Point, putting the boat in at "dark-thirty" and running to Pamlico Point in the cold was not as easy nor as much fun as it had been at 40 or 50. I also found that getting the canoe on and off the top of my SUV was getting more difficult each year, *darn it!*

I began to realize that duck hunting was a young man's activity, and that I was no longer that young. Now don't get me wrong, I still enjoy an occasional hunt from an impoundment at Lake Mattamuskeet or from a scissors rig on Pamlico Sound. The hunting can be great, and someone else does most of the hard work.

I have, however, discovered another form of jump-shooting ducks. This involves a digital camera, a telephoto lens and a window mount for my SUV. Some of the same techniques of gun jump-shootings are involved. You still have to find the ducks, approach with care, be aware of the clues that tell you when the ducks are going to jump, get the camera on the birds and pull the trigger (repeatedly). Here you do not worry about leading a bird, you must be dead on, and in-focus (an autofocus lens is a necessity). Since digital "film" is free (sort of) you fire a burst of shots and then weed out the ones not in focus or where you only captured half a bird. The results can be just as satisfying, however, as a good shot with the shotgun, and you get to preserve the memory in a series of photographs that often show the birds in ways that you only got fleeting glimpses of when hunting with a shotgun.

The photos here show some of my favorite ducks as they leap from the water. I can see detail not usually seen when shotgun hunting, and I can preserve the image well past the moment of shooting. You old fogies might want to try this kind of jump-shooting, and even you young sprouts might enjoy it — the season is much longer (anytime they are here), and there are no bag limits to this kind of jump-shooting. It has surely extended my enjoyment of duck "hunting."

James Parnell is a retired biology professor from UNC-Wilmington and is also an avid wildlife

NATURE'S WAYS

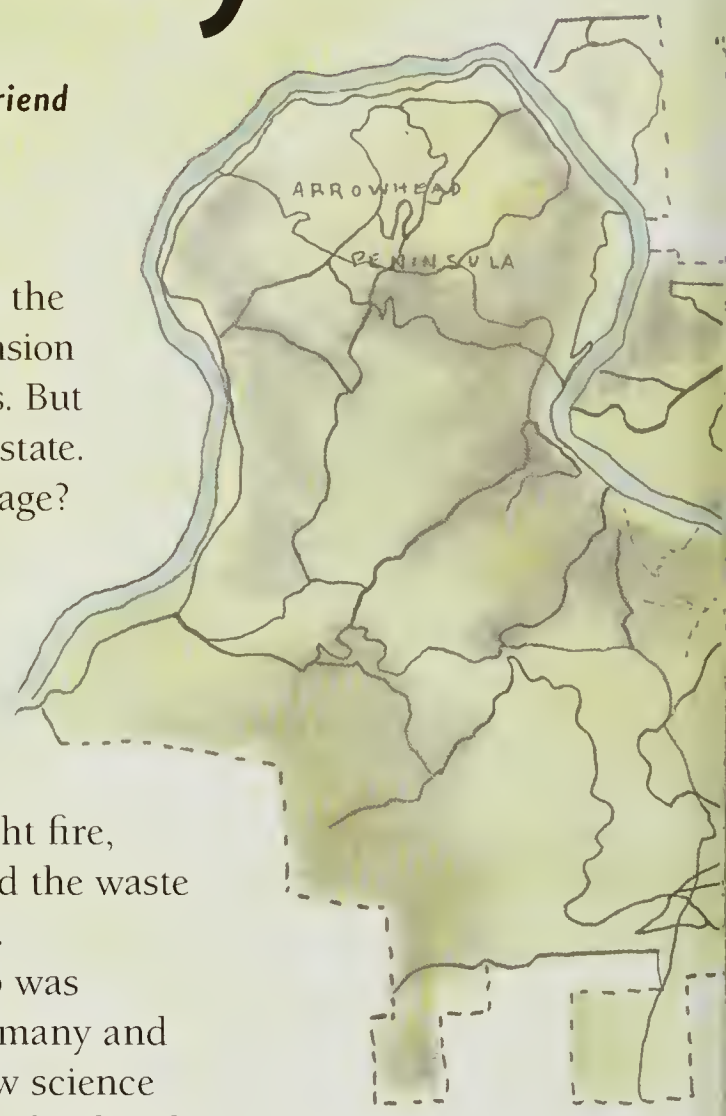
Why Must Diving Ducks "Taxi" To Take Off?

See Nature's Ways, page 43.

Careless logging and fires once ravaged U.S. forests. But then a new science of conservation was born in North Carolina's mountains in a place now known as the

Cradle of Forestry

written by Julie Dunlap / illustrated by Amy Friend
nature activity by Anne Runyon



Young George Vanderbilt loved two things: art and the outdoors. In 1889, he began building a glorious mansion in the Blue Ridge Mountains to showcase his paintings. But cut-over, burned-out forests surrounded his Biltmore Estate. Could even a Vanderbilt's fortune repair the vast damage?

FIRST SEEDS

Vanderbilt's weren't the only damaged woodlands in America. In the fast-growing country, more and more trees were cut each year to clear farmland, heat homes, make paper, and build factories and railroads. Too often, careless harvesters left wood waste behind that caught fire, then rains washed soil off the treeless hillsides. By the 1890s, many feared the waste and destruction could cause a serious shortage of wood, or timber famine.

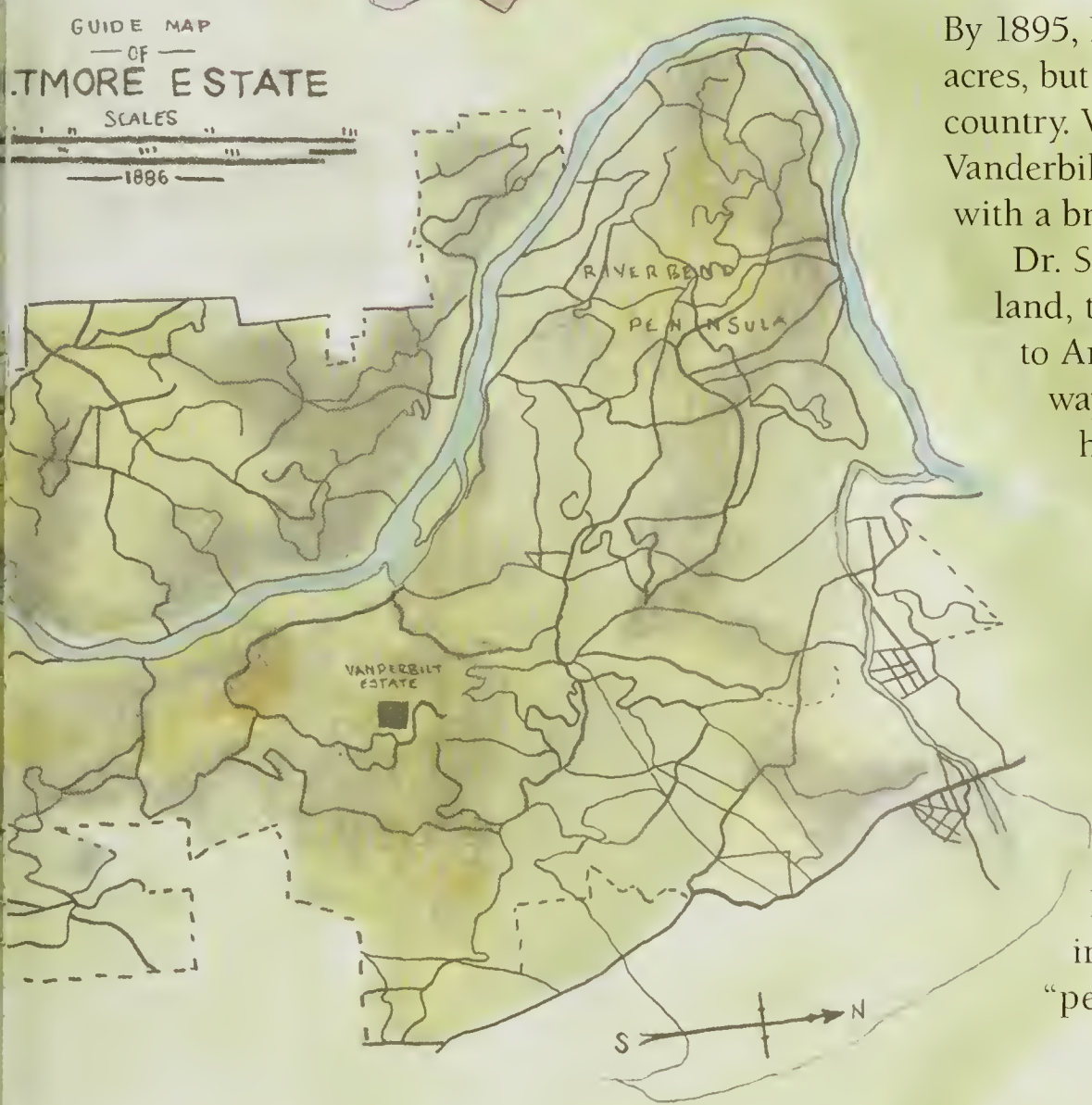
To save his forests, Vanderbilt turned to the famous park designer who was planning Biltmore's grounds. Frederick Law Olmsted had traveled to Germany and France, where tree growth and use were carefully managed through a new science called forestry. Hire a forester, Olmsted told Vanderbilt, who can mend the land and show the nation how forestry works. He told Vanderbilt, "This is your chance."

THE BILTMORE COMPANY

A SCIENCE SPROUTS

But there was only one American with the right training. Fresh from forestry school in France, Gifford Pinchot gladly took the Biltmore job to prove, he said, "trees could be cut and the forest preserved at one and the same time."

On horseback, Pinchot explored Biltmore's woods, getting to know where chestnuts, tulip poplars, pines, and other trees grew, and tallying the number and size of each kind. As he learned more about the damaged forest, he drew plans for its improvement. Tough mountain men he met chuckled at the 26-year-old's odd approach to harvesting trees. Who knew if cutting chosen trees and leaving others standing would make the forest healthier? And who could do it, anyway? But Pinchot grabbed an ax, and dropped a towering oak in a narrow gap between dozens of others. Maybe the brash forester knew something after all.



PLANNING AND PLANTING

By 1895, Biltmore sprawled across 125,000 mountain acres, but Pinchot was ready to study forests around the country. With no other Americans trained to take over, Vanderbilt hired a replacement from Germany armed with a brand-new forestry Ph.D.: Carl A. Schenck.

Dr. Schenck rode hard across Vanderbilt's new land, the Pisgah Forest. So much work to do! New to America's wild woods, he experimented with ways to plant, grow, harvest and market trees to heal the forest and earn money too. Crews of local men helped him replant old fields, chase off timber thieves, build logging roads, haul a portable sawmill, and watch for wildfires.

His experiments sometimes failed. To reforest bare slopes, he tried planting acorns and hickory nuts, but mice ate the seeds. So he set up a nursery to grow native seedlings. With each lesson learned, Schenck moved closer to restoring the mountains Vanderbilt loved while harvesting trees for lasting income—a process Schenck called "permanent forestry."

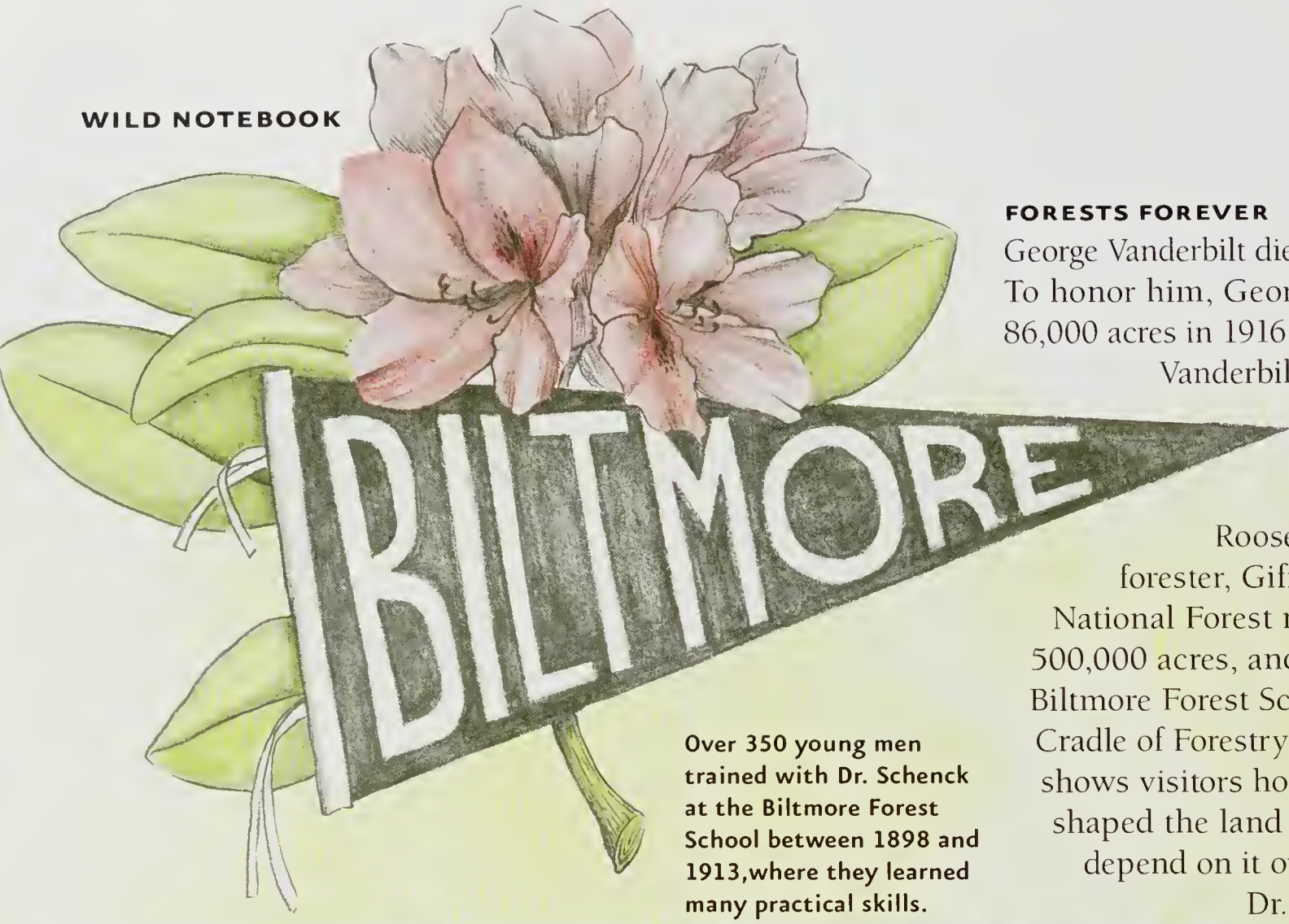
GROWING FORESTERS

Changes in Pisgah Forest caught national attention. Other landowners began to want professional foresters managing their woods too. So Dr. Schenck founded Biltmore Forest School in 1898, the first forestry school in America.

On a typical morning, students—all young men—scribbled notes as Dr. Schenck lectured in the schoolhouse. Their demanding teacher expected each to study plant identification, land surveying, forest economics, and much more. But after lunch, they saddled up to apply their new knowledge outdoors. Students soon grew skillful with ax, shovel, compass, notebook and Biltmore stick—a tool Schenck designed to help students estimate tree height and diameter. Working six days a week and tending their horses on the seventh left little time to relax, but at Saturday night Sangerfests they sang and drank beer. Schenck often joined in, full of pride and warmth toward his "Biltmore boys." Many went on to important careers, and Schenck later wrote that the most important thing he did for forests was to train future foresters.

FOREST HISTORY SOCIETY

After morning lectures in the schoolhouse, Dr. Schenck (in doorway) and his students rode out for lessons in the woods.



FORESTS FOREVER

George Vanderbilt died unexpectedly in 1914. To honor him, George's widow Edith sold 86,000 acres in 1916 to the U.S. government. Vanderbilt's Pisgah Forest became part of a system of national forests built by President Theodore Roosevelt and Biltmore's first forester, Gifford Pinchot. Pisgah National Forest now conserves over 500,000 acres, and in part honors the Biltmore Forest School. Known as the Cradle of Forestry in America, the site shows visitors how forest science has shaped the land and the wildlife that depend on it over the past century.

Dr. Schenck spoke for many when he said, "I pay everlasting tribute to Mrs. Vanderbilt for having preserved those forested scenes of our struggles, so that millions of Americans may draw inspiration from their beauty and some lessons from our pioneer forestry work."

Over 350 young men trained with Dr. Schenck at the Biltmore Forest School between 1898 and 1913,where they learned many practical skills.

D.H. RAMSEY LIBRARY SPECIAL COLLECTIONS, UNC ASHEVILLE

FOREST HISTORY SOCIETY

Get Outside

Visit the Cradle of Forestry. In Pisgah National Forest, trek down the Biltmore Campus Trail to explore original and reconstructed cabins where Forest School students lived, studied, bought supplies, and shod their horses. Along the Forest Festival Trail, you'll learn like a Biltmore boy about planting trees on old farmland, cutting trees to improve woodland health and prevent fires, and drawing scientific plans to better the forest's future. And back at the Forest Discovery Center, you can peek underground at creatures that live below the forest floor, soar in a helicopter simulator to learn how today's foresters monitor wildfires, and watch a movie that ties the history of the Cradle of Forestry to the modern conservation movement. By the end of your visit, you'll want to enroll in the Biltmore Forest School yourself!

Read and Find Out

- "Midnight Forests: A Story of Gifford Pinchot and Our National Forests" by Hines, Gary, Boyds Mills Press, 2005.
- "The Greatest Good: 100 Years of Forestry in America" by Miller, Char and Rebecca Staebler, Society of American Foresters, 2004.
- "Cradle of Forestry in America: The Biltmore Forest School, 1898–1913" by Carl Schenck, Forest History Society, 1998.

In *Wildlife in North Carolina*

- "Biltmore: First in Forestry" by David S. Lee, November 2011

On the Internet

- Biltmore Estate History: biltmore.com/visit/biltmore-house-gardens/estate-history
- Cradle of Forestry: The Birthplace of Forest Conservation in America: cradleofforestry.com/site/
- Grey Towers National Historic Site in Pennsylvania, Gifford Pinchot: fs.fed.us/gt/local-links/historical-info/gifford/gifford.shtml
- First in Forestry: Carl Schenck and the Biltmore Forest School Film Project: foresthistory.org/index.html

Find out more about Project WILD Workshops and literature at the Wildlife Commission's website at ncwildlife.org.

Great Horned Owl Mask

Scientific foresty has helped wildlife in many ways. Methods first taught at the Biltmore Forest School in the 1890s still keep the forest healthy while people use wood resources they need. That means Great Horned Owls can hunt and nest in woodlands throughout North Carolina.

1) Copy design on cardstock and cut out owl design. (You can make mask larger if desired.)

2) Fold beak down the center, along straight line A, creating a mountain fold.

3) Cut two slits in beak, along lines D.

4) Fold up along the curved line B, Pinching along the line to create a valley fold.

5) Fold down along curved line C, creating a mountain fold.

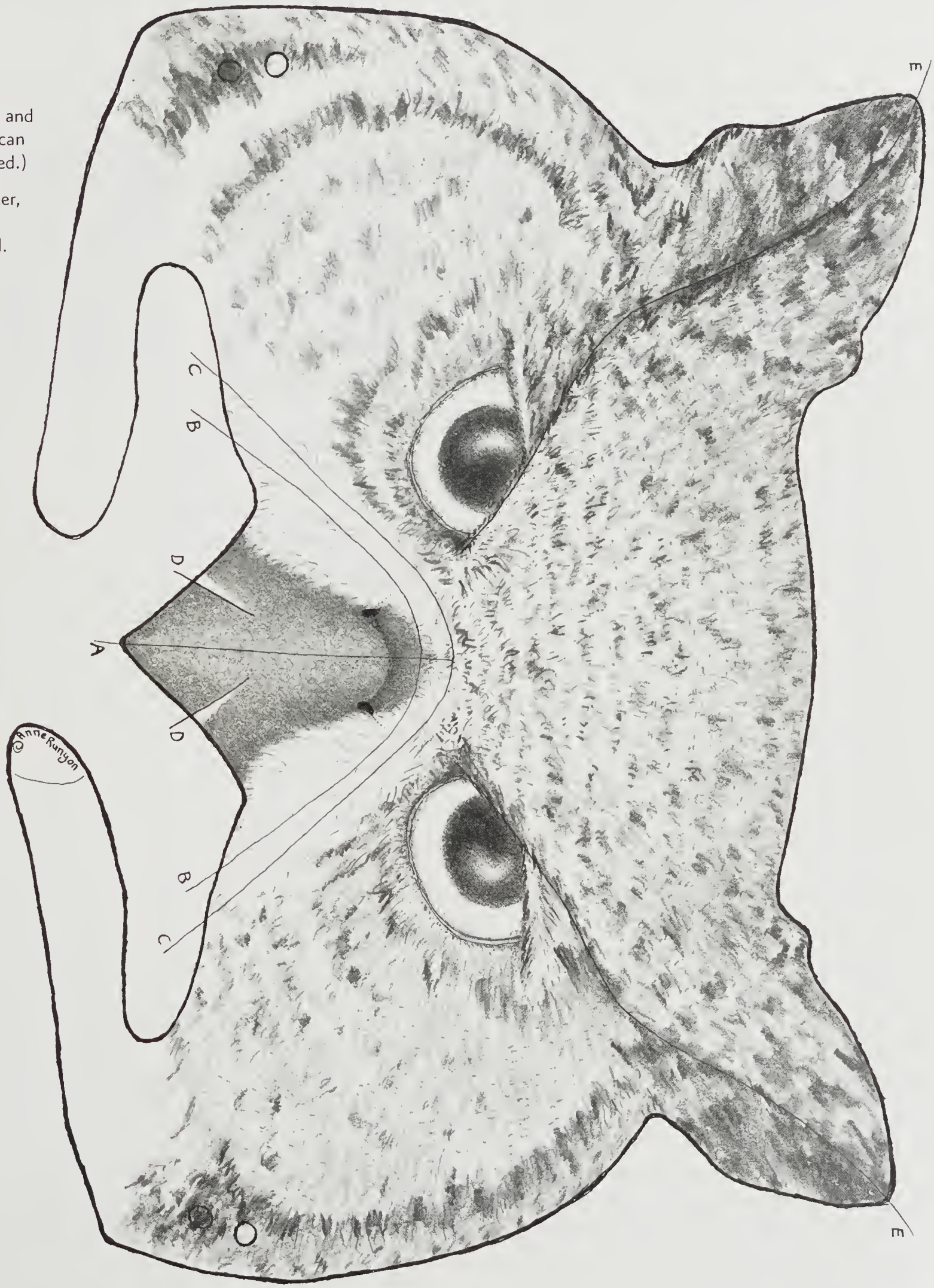
6) Overlap and glue shut D slits in beak. Secure with tape on backside.

7) Fold down along lines E, from edge of ear tufts to front edge of eye, creating a mountain fold.

8) Overlap chin straps and tape together.

9) Punch two holes at edge of cheeks and tie on two strings.

10) Perch the mask on your nose and look out through the hole under the beak.



back porch

NEWS *and* NOTES

Edited by Mike Zlotnicki

New Commissioners Appointed to Serve

MELISSA MCGAW/NCWRC

From left to right: Landon Zimmer, John Stone, Mike Johnson, Richard Edwards and Dean Proctor

The N.C. Wildlife Resources Commission has added five commissioners to its governing board and reappointed six commissioners to new terms.

Landon Zimmer, of Wilmington, was appointed by Senate leader Phil Berger and will serve a two-year term as an at-large commissioner. He enjoys boating, hunting waterfowl and small game, and walking public habitats. As a wildlife commissioner, Zimmer wants to promote hunting and boating education programs to both youth and adults while helping to conserve the state's wildlife resources for future generations' enjoyment.

John Stone, of Jackson Springs, was appointed by House Speaker Tim Moore and will serve a two-year term as an at-large commissioner. A self-described "wildlife geek," Stone says he loves everything about wildlife — hunting, fishing, and just being out in the woods. He is working to become a certified prescribed burner by the N.C. Forest Service, and lists his main topic of interest as a commissioner as prescribed burning for habitat improvement.

Mike Johnson, of Hickory, was appointed by Gov. Pat McCrory and will serve a six-year term as the District 8 wildlife commissioner. District 8 encompasses 11 counties in western North Carolina. Johnson is an avid hunter, particularly of turkey, and has been a Hunter Education Instructor for 13 years. In 2007, he was selected as the District 8 Hunter Education Instructor of the Year. He is also a certified bow hunting instructor. Given his background in instruction, Johnson says one of his topics of interest as a wildlife commissioner will be education and the promotion of a pro-gun, pro-hunting platform.

Dean Proctor, also of Hickory, was appointed by Moore for a two-year term as an at-large commissioner. He also is an avid hunter and has traveled extensively in pursuit of both small and large game. One of his goals as a wildlife commissioner will be increasing hunting opportunities for youth.

Richard Edwards, of Wilmington, has served as a wildlife commissioner since 2013, having been appointed by then-House Speaker Thom Tillis for a two-year term that ended in June. He was appointed by McCrory for a six-year term as the commissioner for District 2, which encompasses 12 counties in southeastern North Carolina. Edwards enjoys "anything outdoors" including deer, bear and turkey hunting, as well as offshore and inshore fishing. As a wildlife commissioner, Edwards wants to provide new opportunities and education for youth hunters while helping to protect the state's wildlife and resources across the state.

The six reappointed commissioners are:

- Nat Harris of Whitsett, who was reappointed by McCrory to a six-year term as the commissioner for District 5, which encompasses 11 counties in the Piedmont.
- Thomas Fonville of Raleigh, who was reappointed by Moore to a two-year term as an at-large commissioner.
- Garry Spence of Charlotte, who was reappointed by Berger to a two-year term as an at-large commissioner.
- Tom Berry of Greensboro, who was reappointed by Berger to a two-year term as an at-large commissioner.
- Tim Spear of Creswell, who was reappointed by Moore to a two-year term as an at-large commissioner.
- Mark Craig of Greensboro, who was reappointed by Berger to a two-year term as an at-large commissioner.

The 19-member commission establishes policies and regulations governing hunting, fishing and boating activities in North Carolina. Members serve until reappointed or replaced.

e NEWSLETTER

Get N.C. Wildlife Update—news including season dates, bag limits, legislative updates and more—delivered to your Inbox from the N.C. Wildlife Resources Commission. Sign up at ncwildlife.org/enews.

Use of Short-barreled Rifles Now Legal for Taking Wildlife in N.C.

The N.C. Wildlife Resources Commission announces that the state now allows the use of short-barreled rifles while legally taking wildlife. A short-barreled rifle is defined by the N.C. General Assembly as "any rifle with a barrel or barrels of less than 16 inches in length or an overall length of fewer than 26 inches."

This statutory change is not reflected in the *2015–2016 North Carolina Inland Fishing, Hunting and Trapping Regulations Digest*, which was published by the N.C. Wildlife Resources Commission before the legislation was passed on Aug. 5.

A hunter or trapper must meet federal requirements to own a short-barreled rifle, which include registering the device and paying a federal tax, along with a criminal background check processed by the sheriff's office in the applicant's county of residence.

"The Bureau of Alcohol, Tobacco and Firearms administers the procedure to own a short-barreled rifle," said Maj. Todd Kennedy, field supervisor for the Commission's Division of Law Enforcement. "The Wildlife Commission does not have any involvement in the process to obtain a short-barreled rifle."

New Access Open for Anglers near Boone

The N.C. Wildlife Resources Commission opened a new public fishing access area in October on the South Fork New River, near Boone in Watauga County.

The Pine Run Public Fishing Area is a partnership between the Commission and High Country Pathways, a non-profit group focused on planning, developing and ensuring the stewardship of trails and blueways in Watauga County.

The fishing area, which is located approximately 5 miles east of Boone (GPS coordinates are 36.2464, -81.5948), consists of a paved parking area with four parking spaces and a set of stairs that can be used to access the river. It is adjacent to additional formal access points in Watauga County and can serve as a takeout point for anglers launching upstream of Pine Run at Hwy. 421 in Boone or as a launch point for anglers and boaters floating downstream to Green Valley Park. For anglers and boaters interested in shorter floats, additional informal access points along the river are located upstream of the new fishing area at Roby Greene Road and downstream of the new fishing area at Castle Ford Road.

"Anglers fishing this stretch of river can expect to catch smallmouth bass, redbreast sunfish, rock bass and wild brown trout," said Kin Hodges, a district biologist with the commission. "As an added bonus, stocked brook, brown and rainbow trout from nearby Wildlife Commission stocking locations above and below the Pine Run access may also be caught seasonally."

KIN HODGES/NCWRC

The Pine Run Public Fishing Area provides access to a section of the South Fork New River that is relatively shallow and rocky, making it an ideal access for wade fishing or fishing from a paddlecraft. This section of river is not suitable for larger, motorized boats.

"This project is a great example of the types of partnerships the commission seeks out to advance its goals of improving public access to waterways across the state," Hodges said. "High Country Pathways had secured grant funding to go toward the development of access points along the New River in Watauga County. By the commission assisting with the development of the Pine Run site, High Country Pathways was able to stretch its funding further and develop an additional river access point at Green Valley Park."

For its part of the project, commission staff graded the site, installed drainage structures, fencing and wheelstops and built the access stairs. The agency funded the construction project using Sport Fish Restoration Program money and fishing license sales receipts.

Site paving was paid for by funds raised by High Country Pathways and a contribution from the Watauga County Tourism Development Authority. The N.C. Department of Transportation was an additional partner in the project. NCDOT owns the right of way on which the fishing area is located and granted permission to Watauga County to develop it as an access area.

For more information on fishing in public, inland waters, including an interactive map of more than 500 public fishing access areas throughout the state, visit ncwildlife.org.

IN SEASON

In January and February, these seasons are open in North Carolina:

Black Bear: Through Jan. 1 (See *Regulations Digest* for locations.)

Bobcat: Through Feb. 29

Brant: Through Jan. 30

Canada Goose and White-Fronted Goose: Resident Population Zone through Feb. 13; Northeast Hunt Zone Jan. 15–Jan. 30 by permit only.

Common Snipe: Through Feb. 27

Crow: Through Feb. 27

Ducks, Coots and Mergansers: Through Jan. 30

Sea Ducks (In special sea duck areas only): Through Jan. 30

Fox: See *Regulations Digest* for seasons and locations

Hatchery Supported Trout Waters: Through Feb. 29

Light Geese (Snow, Blue and Ross'): Through March 13

Mourning Dove: Through Jan. 15

Pheasant: Through Feb. 1

Quail: Through Feb. 29

Rabbit: Through Feb. 29

Raccoon and Opossum: Through Feb. 29

Ruffed Grouse: Through Feb. 29

Squirrel: Gray and red through Feb. 29

Tundra Swan: Through Jan. 30, by permit only

White-Tailed Deer: Eastern, Central and Northwestern through Jan. 1. Western is closed

Woodcock: Through Jan. 30

Youth Waterfowl Days: Feb. 7 and Feb. 3

CALENDAR OF EVENTS

Friday–Sunday, Jan. 8–10

It may be cold outside, but that's no reason to stay home. Head out to the 26th Bass & Saltwater Fishing Expo at the State Fair Grounds in Raleigh. The Jim Graham Building and the Exposition Center will have marine dealers, tackle dealers and there will be a full slate of seminars from professional anglers and guides. Go to ncboatshows.com for more information.

Friday–Sunday, Feb. 5–7

The 21st Annual East Carolina Wildlife Arts and Decoy Carving Festival is slated for Washington. The new North Carolina Duck Stamp winner will be announced and there is plenty of wildlife art for sale along with duck calling and decoy carving competitions. Visit ecwaf.com for more information and to get tickets online.

Thursday–Sunday, Feb. 11–14

The 44th Annual Mid-Atlantic Boat Show in Charlotte promises to be a big event. Look for seminars on boat maintenance in addition to seminars on fishing. Visit midatlanticboatshow.com for details.

Readers should check with the contact listed before traveling to an event. Items for listing should be conservation-oriented and should be submitted at least four months in advance to mike.zlotnicki@ncwildlife.org, or call 919-707-0175.

LIFETIME LICENSES

Help conserve wildlife for future generations. In 1981, hunters, anglers and wildlife enthusiasts became shareholders in an innovative investment and conservation program called the North Carolina Wildlife Endowment Fund.

Today, the commission has 19 different lifetime licenses in five categories: Infant, Youth, Adult, Senior and Disabled.

The endowment fund for wildlife was a simple yet revolutionary idea: Create a lifetime inland fishing or hunting license. Put the license fees into a special fund. Spend the accrued interest, not the principal, on programs and projects that benefit fish and wildlife. To learn more or to purchase a lifetime license visit ncwildlife.org/licensing or call 1-888-248-6834.

Management Plans for Game Lands Available

The N.C. Wildlife Resources Commission has posted on its website the final versions of seven game land management plans.

The Commission developed the plans to provide a management framework for these public lands that balances science-based conservation practices with public access and usage. The commission solicited input at local meetings and online to provide opportunities to the public to comment on game lands management.

Management plans are available for the following game lands:

- Green River, comprising 14,331 acres in Henderson and Polk counties
- Holly Shelter, comprising 64,743 acres in Pender County
- Lower Roanoke River Wetland, comprising 10,200 of state-owned acres in Martin and Bertie counties
- R. Wayne Bailey-Caswell, comprising 17,788 acres in Caswell County
- Suggs Mill, comprising 11,044 acres in Bladen and Cumberland counties
- Sandhills, comprising 62,735 acres in Hoke, Moore, Scotland and Richmond counties
- Sandy Mush, comprising 2,832 acres in Buncombe and southern Madison counties

NORTH CAROLINA Wildlife GAME LANDS

Each management plan has general information about the game land itself, including physical attributes, infrastructure, potential improvements, and other amenities found on the game land. Each plan is the culmination of a broad array of input, ideas and needs expressed by land managers and public users of the game lands. The plans are living documents and are meant to change as conditions and conservation and public needs change.

Download the game land plans at ncwildlife.org/Hunting/WheretoHunt/PublicPlaces and learn more about the Game Land Program in North Carolina.

January 2016 Public Hearings Schedule

Proposed changes in wildlife and fisheries management rules will be discussed. All hearing times are 7 p.m.

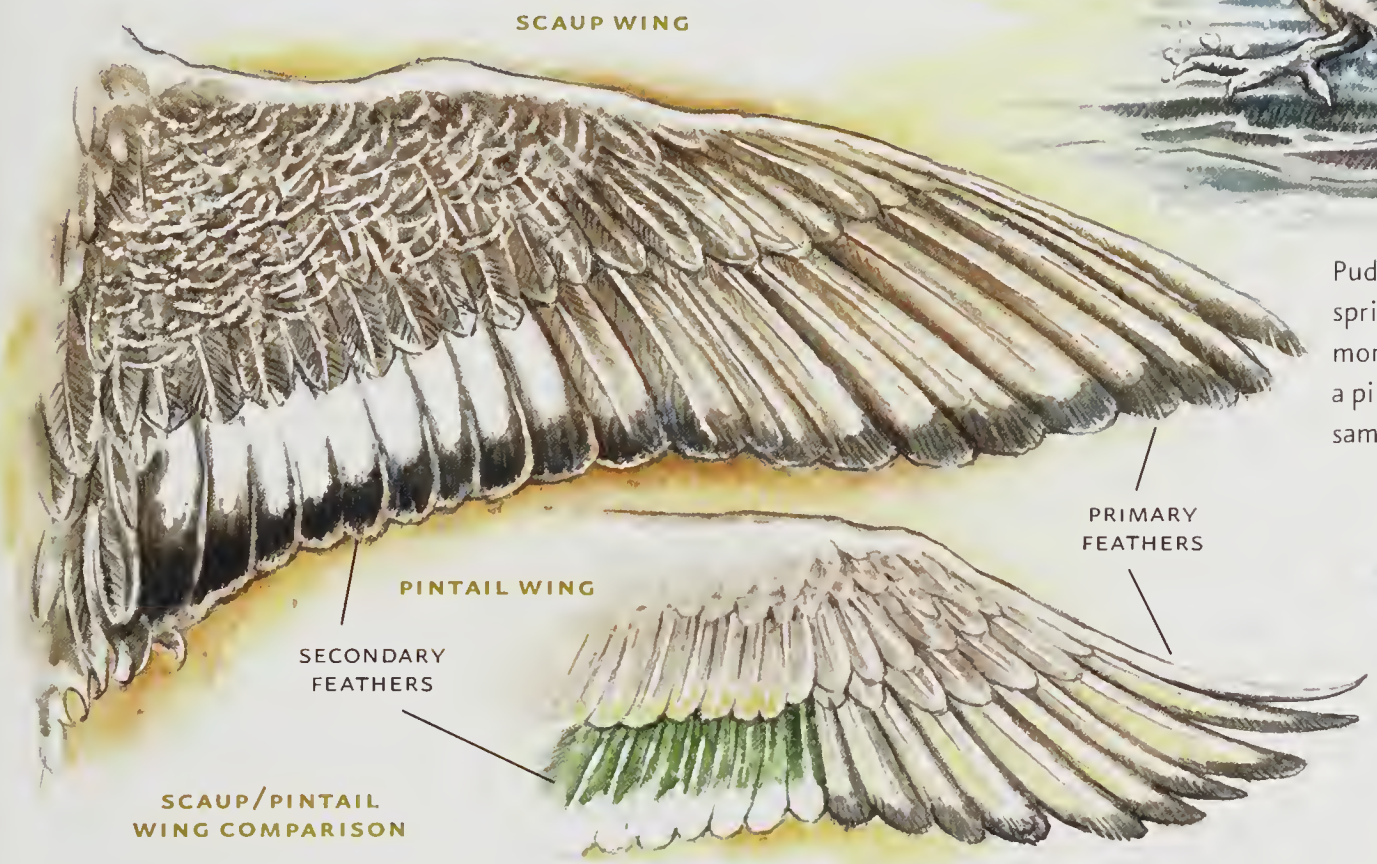
DATE	DISTRICT	CITY	LOCATION
Jan. 5, 2016	4	Dublin	Bladen Community College
Jan. 6, 2016	5	Graham	Southern Alamance High School
Jan. 7, 2016	6	Norwood	South Stanly High School
Jan. 12, 2016	9	Clyde	Haywood Community College
Jan. 13, 2016	8	Morganton	Western Piedmont Community College
Jan. 14, 2016	7	Elkin	Elkin High School
Jan. 19, 2016	1	Edenton	Swain Auditorium
Jan. 20, 2016	2	New Bern	Craven Community College
Jan. 21, 2016	3	Rocky Mount	Nash Community College

Why Must Diving Ducks "Taxi" To Take Off?

written by Clyde Sorenson
illustrated by Jim Brown

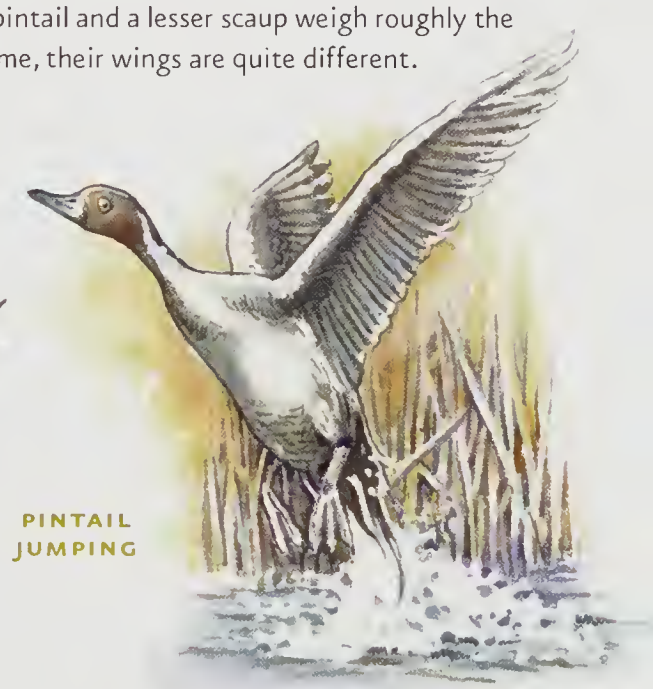
DIVING DUCKS, SUCH AS THE SCAUP, are generally creatures of wide open waters, where they have the room to taxi across the water's surface to take off. They must do this because of the shape and size of their wings.

SCAUP TAKING FLIGHT



SCAUP/PINTAIL WING COMPARISON

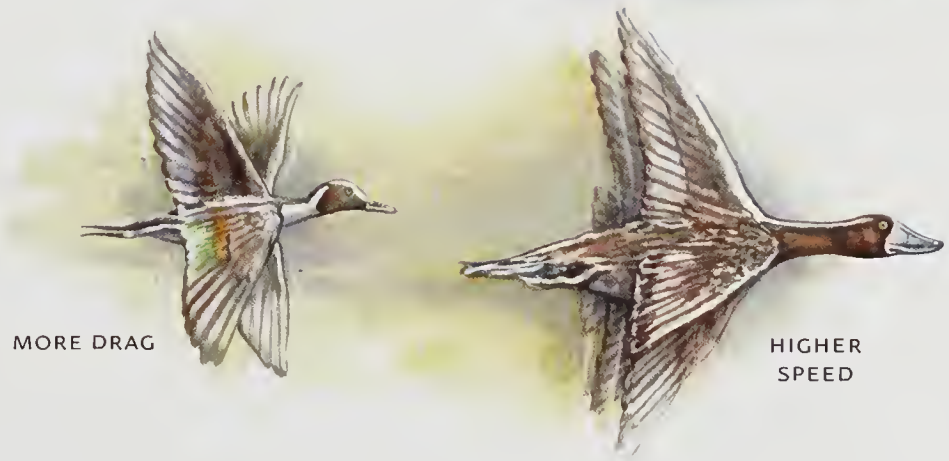
Puddle ducks like pintails have the ability to spring directly from the water's surface and more or less directly into flight. Even though a pintail and a lesser scaup weigh roughly the same, their wings are quite different.

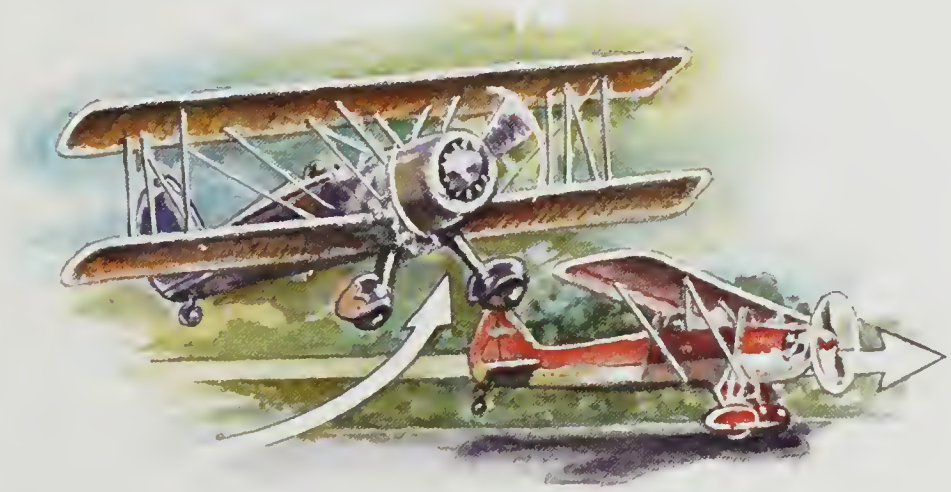


PINTAIL JUMPING

Duck wings are, in a way, a combination propeller and lift-generating airfoil; the primaries provide the propulsion, while the secondaries provide most of the lift. Most puddle ducks have proportionately longer and broader wings than diving ducks of the same weight. This means that puddle ducks have lower wing-loading, each square inch of the puddle duck's wing must help lift less weight than the same area on a diving duck wing.

Flying things with high wing loading usually must be traveling faster to reach flight speed. A biplane, with its huge wing area, can lift off in a very short distance and quite a slow speed, while a single-winged aircraft weighing the same and with a similar wingspan must reach a much higher speed to leave the ground.





However, longer and broader wings, along with generally longer and broader tails, produce more drag, and so puddle ducks generally fly slower than most diving ducks. To generate the necessary lift to stay in the air with their proportionately smaller airfoils, diving ducks typically flap their "propellers" at noticeably higher rates than puddle ducks — a useful thing to know when you're trying to identify flying ducks at a great distance.

The Mouse Wars

written by Jim Dean

In what seems to have been another life long, long ago, I hunted mice. How I came to do so with an air rifle inside my house is not a high point in my sporting life. I don't think I have told this story, and you may conclude that my reticence to do so before now was well founded. But it did happen, and while a certain bemused wonderment has replaced the desperation that provoked it, at least one witness was thoroughly convinced that I had slipped over the edge into lunacy.

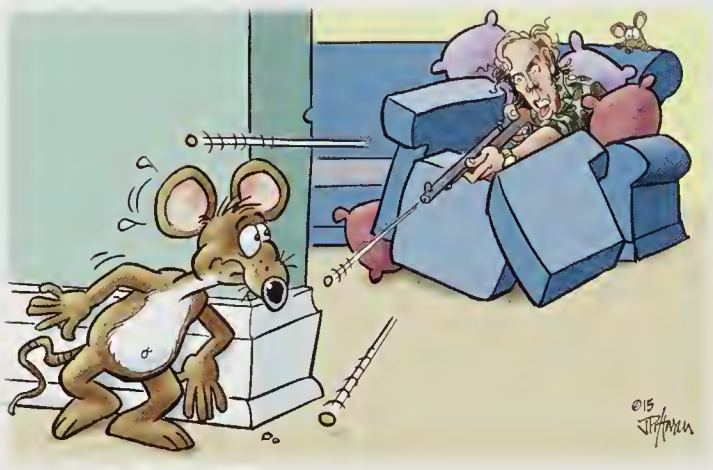


ILLUSTRATION BY JACK PITTMAN

At the time, I was just beginning my second job out of college with limited financial resources and living in an old rundown house. Through no clear fault of my own—I am almost neurotically tidy and fastidious—the house was infested with mice (I suspect I inherited them). You might better appreciate my dismay at this turn of events if you also know that I have always seemed to attract a wide variety of unwelcome varmints.

"I had my hands on the .22 rifle in the gun cabinet when I spotted the old Daisy Red Ryder carbine I'd had since childhood. Fewer holes in the walls, I thought."

When I originally bought that miserable house, I discovered that the pest control company contracted by the seller had failed to inspect it for termites. Looking at the damage, my father had aptly remarked that I now knew the real definition of "The Silent Majority." It took over a year and the threat of lawsuits to get repairs made and that issue settled.

It did not help that just prior to the mouse explosion I also survived a massive bloom of fleas. In desperation, I offered a neighborhood dog a piece of bacon to wander through all the rooms with me. Poor Snorkums; I still regret that dastardly deed. Snorkums was literally staggering under her load of fleas when I took her back outside for a bath, treatment, and her meager reward. Even so, I had to seek professional help to finally get rid of all the fleas.

I suppose I could say, however, that this house and its issues prepared me philosophically for what has turned out to be a lifelong (so far) understanding that we share this fragile planet with lots of living creatures that aren't always Disney cute and user friendly. A short list of those I've been intimately familiar with would include skunks (under the house), possums (dead in a heating duct), wasps (in the farm houses), beavers (eating my pond cypress), coyotes (eating everything else), snakes and black widows (in an outhouse) and chiggers, ticks, cockroaches, yellow jackets and fire ants (well, you know where).

As for hunting those mice, it at least provided a measure of satisfying revenge. I knew I had mice, and had set traps, but with little lasting effect. Late one evening, I was working on a wooden ship model when a mouse hopped up on the desk and sat down to watch (Good Heavens, I thought, it's Stuart Little waiting for his boat). He left reluctantly when I got up. Through the kitchen door, I saw another mouse run across the floor. Still another was on the counter gnawing on a box of cereal. In the den, I spotted another. I could literally hear the patter of little feet throughout the house. It was at that point that I sort of flipped out.

I had my hands on the .22 rifle in the gun cabinet when I spotted the old Daisy Red Ryder carbine I'd had since childhood. Fewer holes in the walls, I thought. Quieter, too. I loaded the Daisy full, stepped into the kitchen and gunned down the counter mouse with a quick instinctive shot. I was thrilled. The hunt was on.

A mouse in the living room bit the dust, and so did one under my desk and another in the kitchen. Four down, and I was sneaking around looking for more. But the mice were getting wary, and it was hard to hit them racing for cover. I needed another approach. The den next to the kitchen seemed to be a hotspot, so I yanked the cushions and pillows off the sofa, built a blind and crouched inside.

The phone rang. I climbed out and answered it.

"What'cha doing?" asked my old fishing buddy, Tom Cooper.

"I'm hunting mice," I said.

"No, really," Tom laughed.

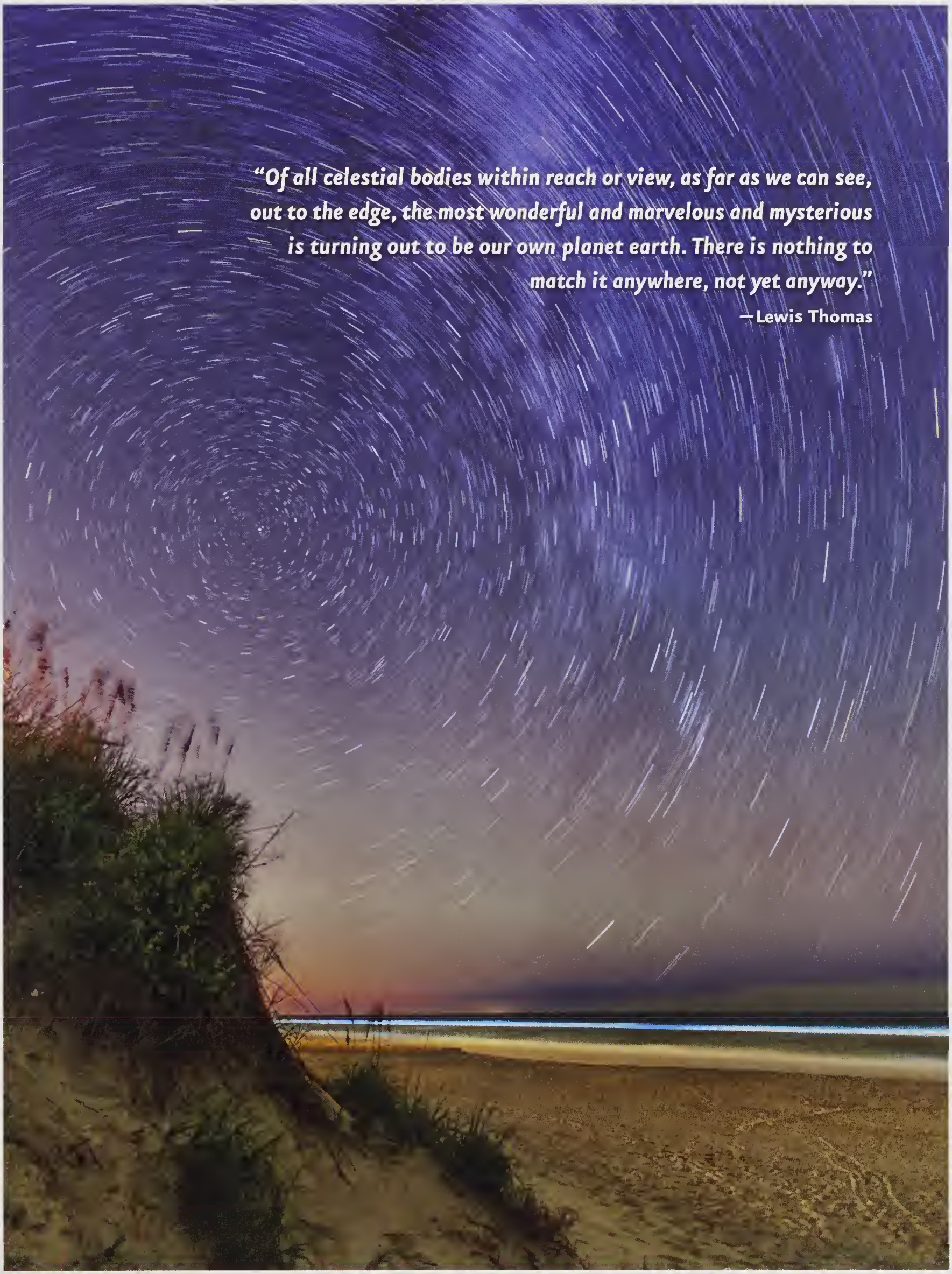
So I told him the whole story, which I think at first he didn't believe. But he detected the somewhat crazed tone of my voice, and he was at least partially aware of what I had been dealing with.

"Wait right there," he said alarmed.

"Where am I going?" I said. "Besides, this is great. Just a little cleanup later. No problem. Hey, gotta get back in the fort. They're massing for an attack."

It seemed like only minutes before Tom was banging on the front door. I opened it Daisy in hand. I don't recall exactly what transpired next, but the hunt was over, and a pest control swat team cleared the perimeter a few days later.

But I learned one thing for sure. Mother Nature always bats last.

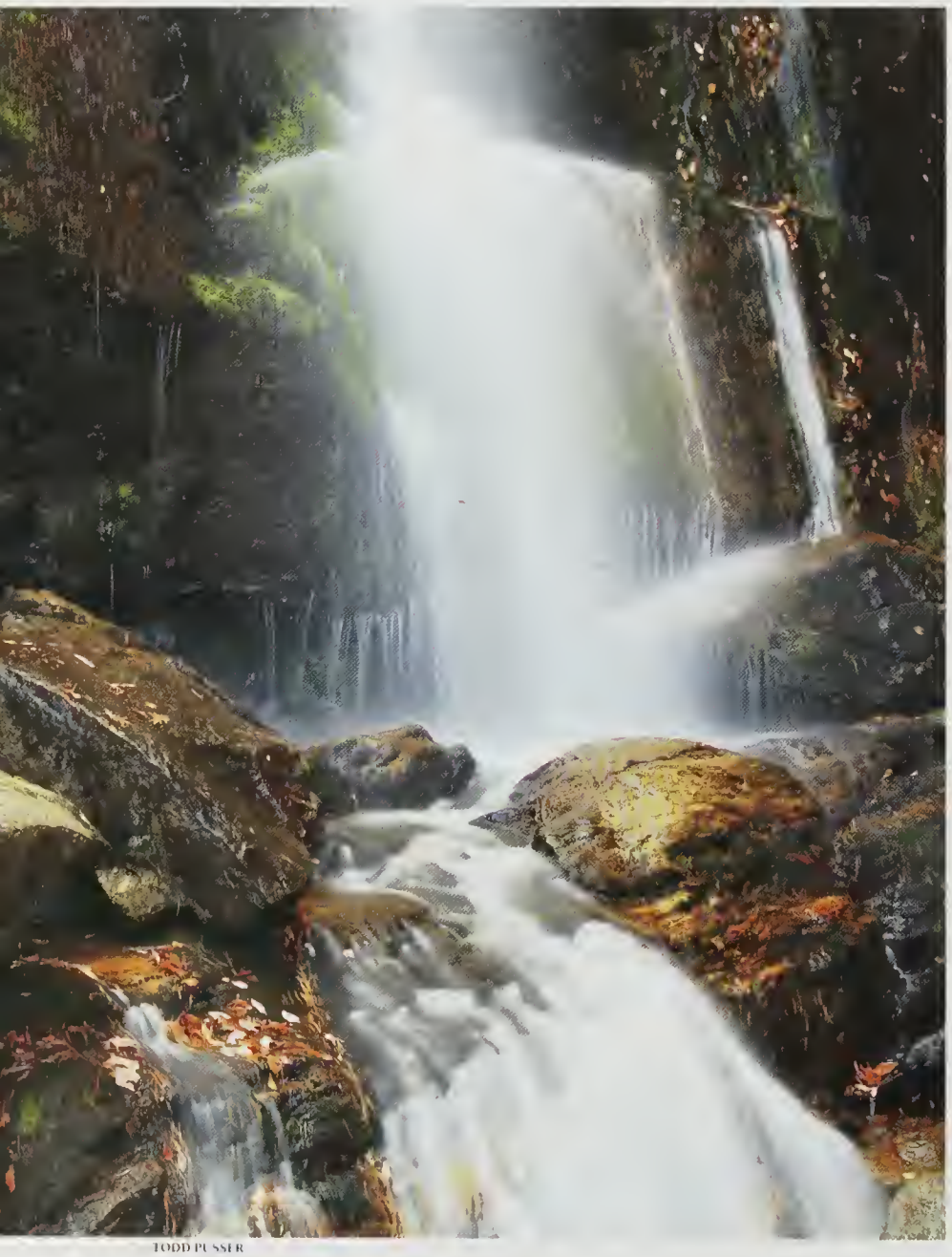


DAN WATERS

Long exposure night sky, Corolla

OUTDOOR MOMENT

IN THE MARCH · APRIL ISSUE



TODD PUSSER

MAKING MEMORIES

From the Smoky Mountains to sandy beaches, North Carolina state parks are home to over 15 million visitors annually. This year, the park system celebrates 100 years of service to the Old North State.

WHICH FLY TO TIE ON?

Sporadic hatches on our mountain waters make matching the hatch less important, and fly selection more difficult. Sometimes a fly needs to act like prey as much as look like prey.

A BETTER TURKEY GUNNER

Successful turkey hunting starts with knowing your gun, not your quarry. Read about some simple steps to help get intimate with your firearm.

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OR FIND US ON THE WEB AT ncwildlife.org

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